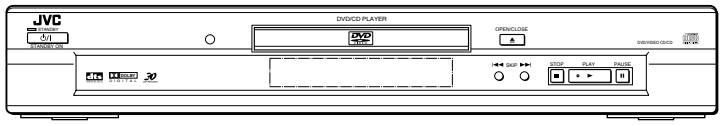
XV-S40BK/XV-S42SL
XV-S45GD/XV-S30BK
XV-E100SL

JVC

SERVICE MANUAL

DVD VIDEO PLAYER

XV-S40BK/XV-S42SL
XV-S45GD/XV-S30BK
XV-E100SL
[MK2]



For only Asia

This service manual is a service manual of the model which changes a part of specification of the above-mentioned model which has already been put on the market.
Please refer to the following page for details.

Area Suffix (XV-S40BK/XV-S30BK)
J ---------- U.S.A.
C ---------- Canada

Area Suffix (XV-S42SL)
C ---------- Canada
A ---------- Australia
UG -------- Turkey,Egypt, South Africa
US ---------- Singapore
UP ---------- Korea
UW - Brazil,Mexico,Peru

Area Suffix (XV-S45GD)
J ---------- U.S.A.

Area Suffix (XV-E100SL)
J ---------- U.S.A.
C ---------- Canada
US ---------- Singapore
UP ---------- Korea
UB ---------- Hong Kong

Contents

For this service manual ---------- 1-2
Safety precautions ---------- 1-3
Preventing static electricity ---------- 1-4
Importance admistering point on the safety ---------- 1-5
Important for laser products ---------- 1-6
Precautions for service ---------- 1-7
Disassembly method ---------- 1-8
Adjustment method ---------- 1-17
Troubleshooting ---------- 1-21
Description of major ICs ---------- 1-25

This service manual is printed on 100% recycled paper.

COPYRIGHT © 2001 VICTOR COMPANY OF JAPAN, LTD.

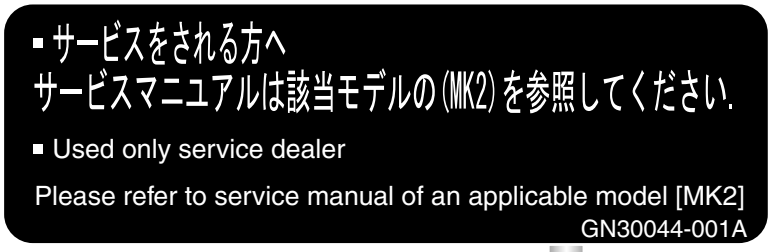
No.A0023
Nov. 2001

For this service manual

This service manual is a service manual of the model which changes a part of specification of the above-mentioned model which has already been put on the market.

< When the label in figure is pasted in the main body >

The specification is different from what the label of the same model does not paste because of the specification improvement, and refer to this service manual, please.
Please already refer to the issued service manual when the label is not pasted.



* Please refer to this service manual for the model to which this label is pasted.
* Please refer to the service manual which has already been issued for the model to which this label is not pasted.
(one that there is no description named [MK2] in cover of service manual and Refer to the undermentioned table.)

■ For instructions

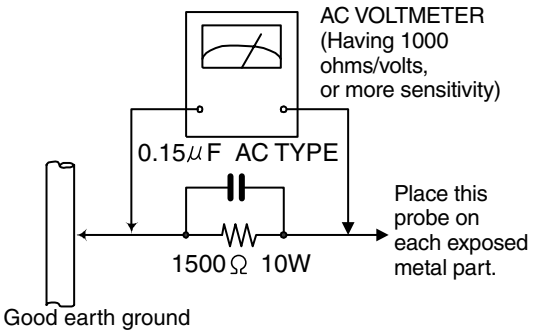
* Both of the instructions are also common and refer to the service manual which has already been issued, please.

Service manual which has already been issued

Model name	Version	Issue
XV-S40BK/S30BK	ver.J,C	A0003 2001 February
XV-S42SL	ver.C ver.A,UG,US,UP,UW	A0003 2001 February A0014 2001 June
XV-S45GD	ver.J	A0003 2001 February
XV-E100SL	ver.J,C ver.US,UP,UB	A0010 2001 April A0014 2001 June

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)
   After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ CAUTION

Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.
When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the J and C version)

Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.1. Grounding to prevent damage by static electricity

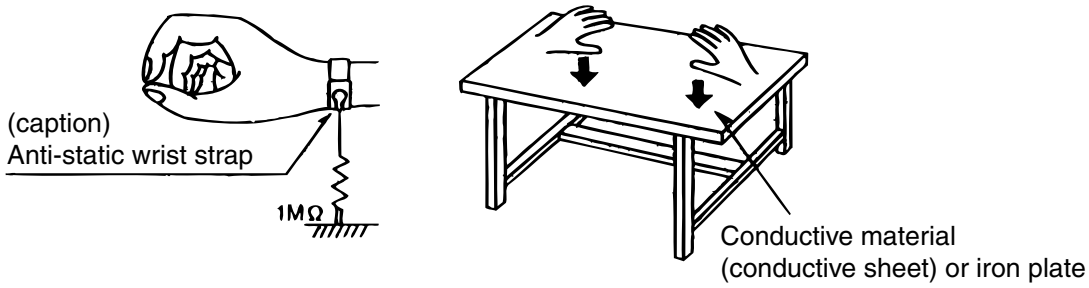
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

1.1.1. Ground the workbench

1. Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

1.1.2. Ground yourself

1. Use an anti-static wrist strap to release any static electricity built up in your body.



1.1.3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

1.2. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

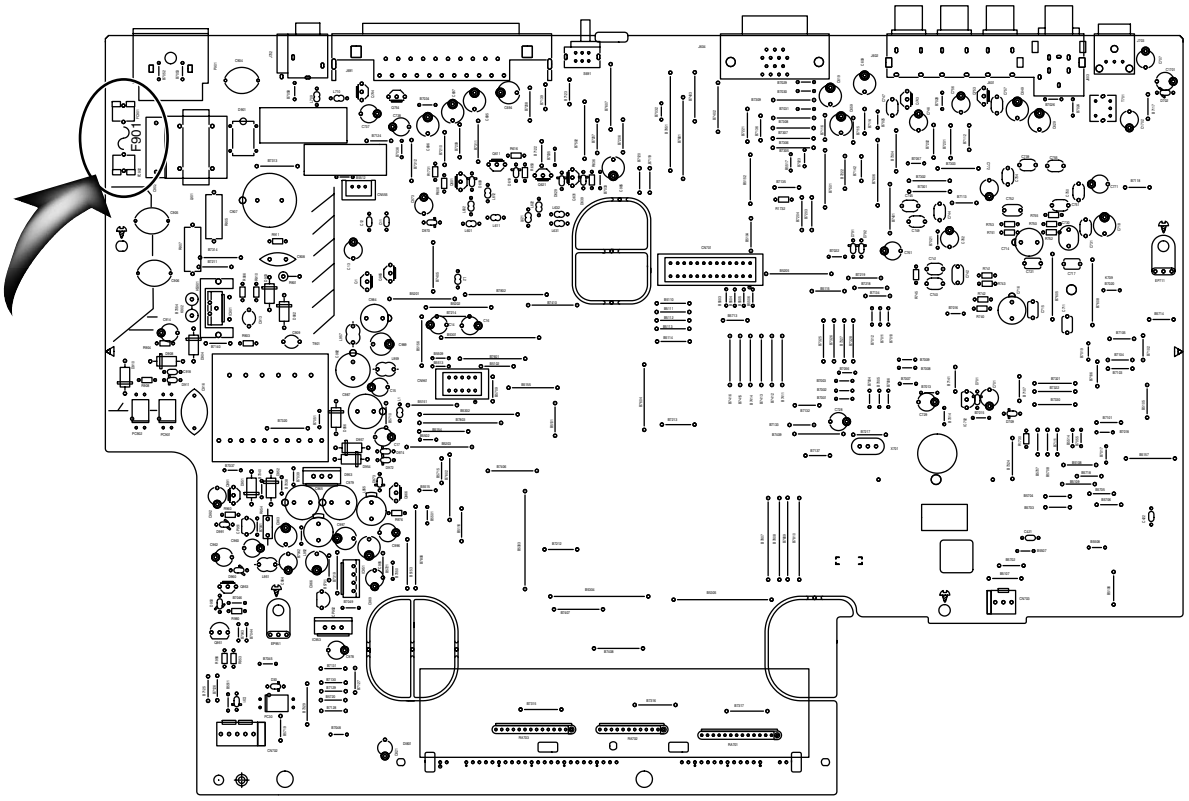
2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Importance admistering point on the safety

< For only version J,C >



Full Fuse Replacement Marking	**Marquage Pour Le Remplacement Complet De Fusible**
Graphic symbol mark (This symbol means fast blow type fuse.) should be read as follows ;	Le symbole graphique (Ce symbole signifie fusible de type á fusion rapide.) doit être interprété comme suit ;
FUSE CAUTION	**PRECAUTIONS SUR LES FUSIBLES**
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSES ; **F901 : 1.6 A / 125 V**	**POUR UNE PROTECTION CONTINUE CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE ;** **F901 : 1.6 A / 125 V**

Important for laser products

< For only europe >

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

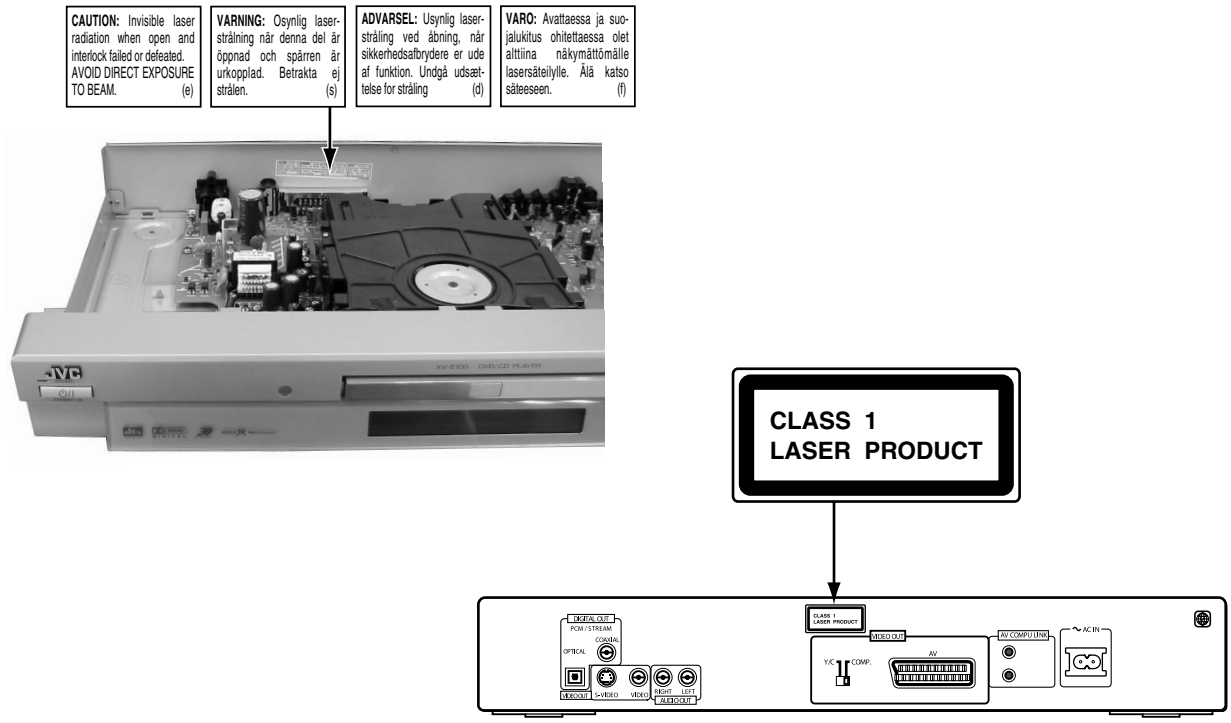
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT


CAUTION: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)
VARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)
ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d)
VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)
CLASS 1
LASER PRODUCT

Precautions for Service

Handling of Traverse Unit and Laser Pickup

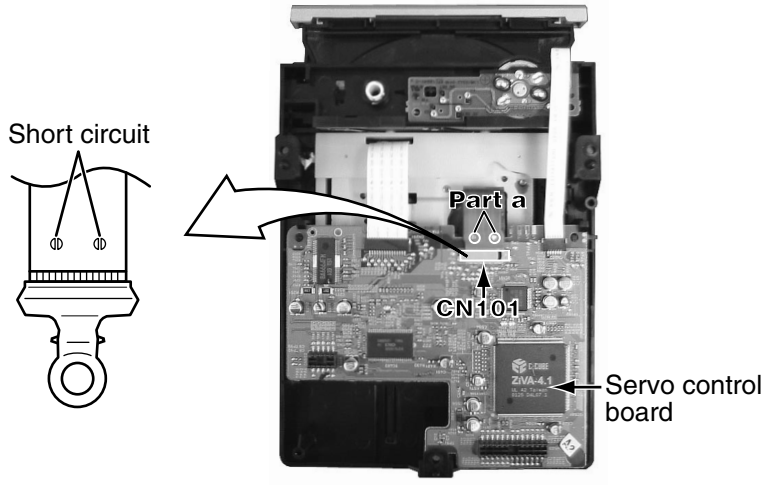
1. Do not touch any peripheral element of the pickup or the actuator.
2. The traverse unit and the pickup are precision devices and therefore must not be subjected to strong shock.
3. Do not use a tester to examine the laser diode. (The diode can easily be destroyed by the internal power supply of the tester.)
4. To replace the traverse unit, pull out the metal short pin for protection from charging.
5. When replacing the pickup, after mounting a new pickup, remove the solder on the short land which is provided at the center of the flexible wire to open the circuit.
6. Half-fixed resistors for laser power adjustment are adjusted in pairs at shipment to match the characteristics of the optical block.
   Do not change the setting of these half-fixed resistors for laser power adjustment.

Destruction of Traverse Unit and Laser Pickup by Static Electricity

Laser diodes are easily destroyed by static electricity charged on clothing or the human body. Before repairing peripheral elements of the traverse unit or pickup, be sure to take the following electrostatic protection:

1. Wear an antistatic wrist wrap.
2. With a conductive sheet or a steel plate on the workbench on which the traverse unit or the pick up is to be repaired, ground the sheet or the plate.
3. After removing the flexible wire from the connector (CN101), short-circuit the flexible wire by the metal clip.
4. Short-circuit the laser diode by soldering the land which is provided at the center of the flexible wire for the pickup.
   After completing the repair, remove the solder to open the circuit.

Please refer to "Fig.4" of "Disassembly method" for details.



Disassembly method

There is a part different from the photograph according to the model and the destination though explains this disassembly method by using XV-E100SL.

<Main body>

■ Removing the top cover (see Fig.1)

1.Remove the two screws **A** attaching the top cover on both sides of the body.

2.Remove the three screws **B** attaching the top cover on the back of the body.

3.Remove the top cover from the body by lifting the rear part of the top cover.

ATTENTION: Do not break the front panel tab fitted to the top cover.

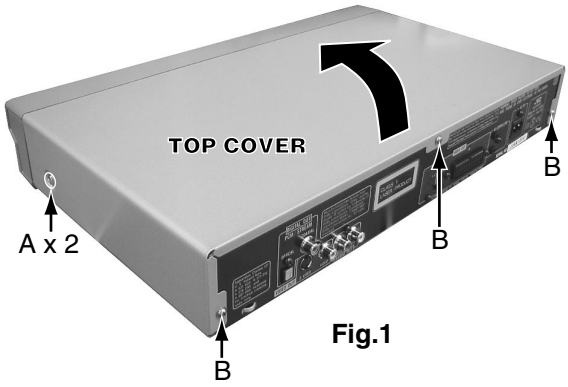


Fig.1

■ Removing the mechanism assembly (see Fig.2,3)

* Prior to performing the following procedure, remove the top cover.
* There is no need to remove the front panel assembly.

1.Remove the three screws **C** attaching the mechanism assembly on the bottom chassis.

2.Remove the two screws **F** attaching the lug wire and main board on the bottom chassis.

3.The servo control board is removed from the connector CN961 and CN701 connected with the main board respectively.

4.Remove the mechanism assembly by lifting the rear part of the mechanism assembly.

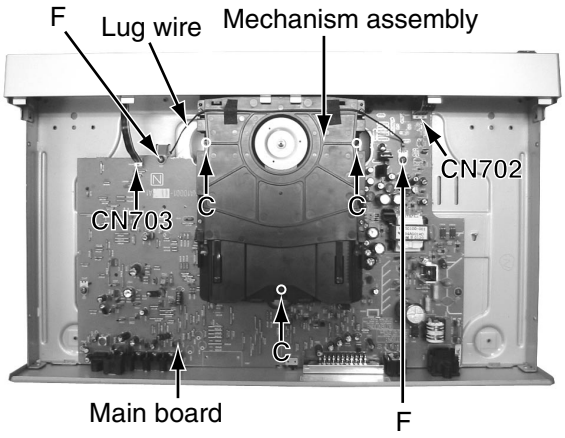


Fig.2

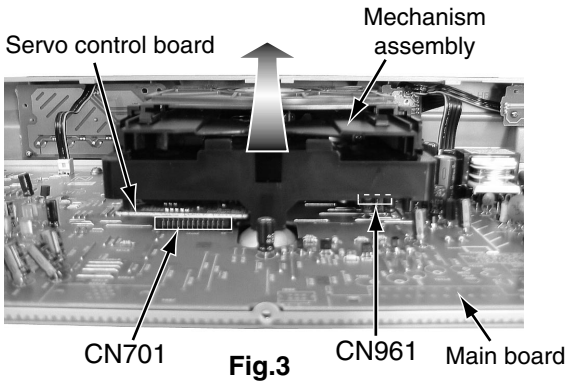


Fig.3

■ Removing the servo control board (see Fig.4)

* Prior to performing the following procedure, remove the top cover and mechanism assembly.

1.Disconnect the card wire from connector CN201 and CN202 on the servo control board respectively.

2.Disconnect the flexible wire from connector CN101 on the servo control board from pick-up.

< **ATTENTION** >
At this time, please extract the wire after short-circuited of two places on the wire in part **a** with solder.
Please remove the solder two places of part **a** after connecting the wire with CN101 when reassembling.

3.Two places in hook **b** are removed, the servo control board is lifted, and it is removed.

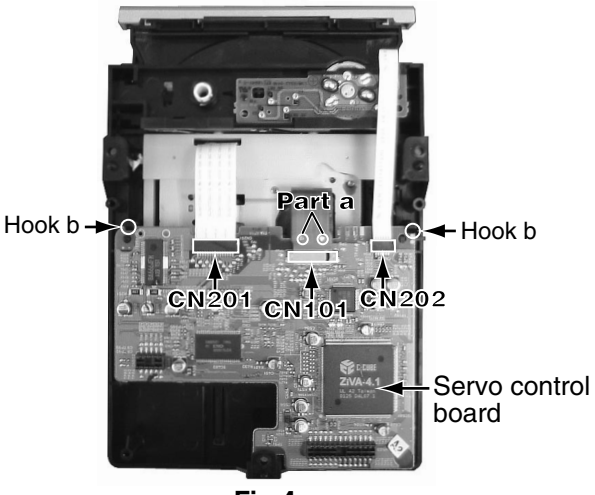


Fig.4

■ Removing the rear panel (see Fig.5)

*Prior to performing the following procedure, remove the top cover.

1.Remove the eight screws **D** attaching the rear panel on the back of the body.

* As for the screw **D**, the number and the position are different according to the destination.

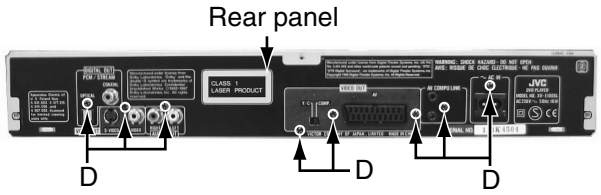


Fig.5

■ Removing the front panel assembly (see Fig.6,7)

* Prior to performing the following procedure, remove the top cover.
* There is no need to remove the mechanism assembly.

1.Remove the one screw **E** attaching the front panel assembly on the bottom chassis.

2.Disconnect the wire from CN702 and CN703 on the main board respectively.

3.Hook **c** and **d** are removed respectively, and the front panel assembly is removed.

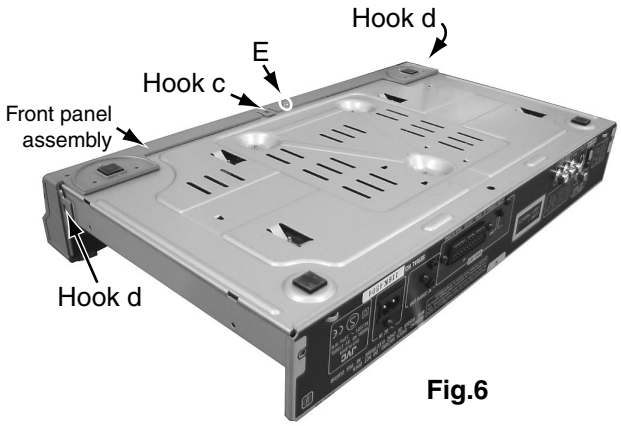


Fig.6

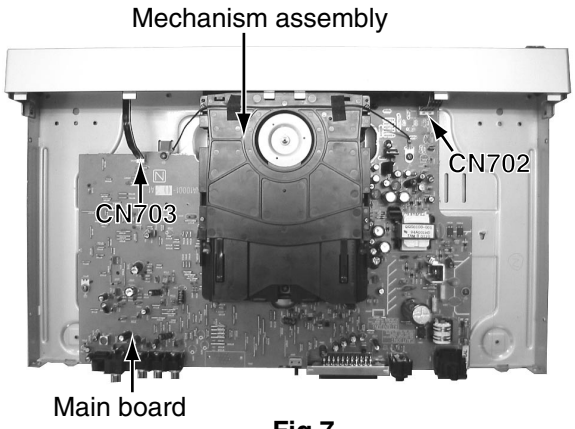


Fig.7

■ Removing the main board (see Fig.8)

* Prior to performing the following procedure, remove the top cover, mechanism assembly and rear panel.

1.Disconnect the wire from CN702 and CN703 on the main board respectively.

2.Remove the four screws **F** attaching the main board on the bottom chassis.

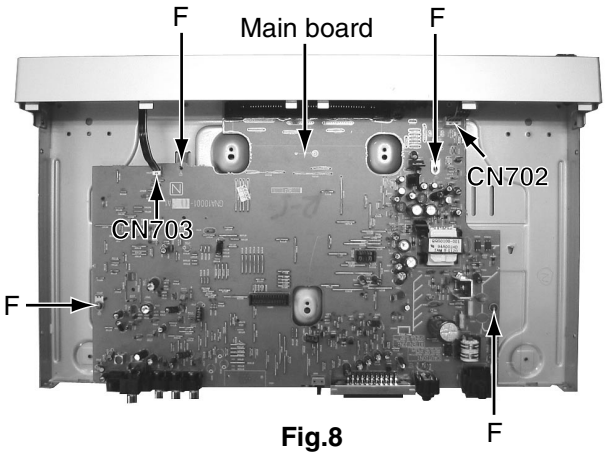


Fig.8

<Loading assembly section>

■ Removing the clamper assembly (See Fig.1)

1. Remove the four screws **A** attaching the clamper assembly.

2. Move the clamper in the direction of the arrow to release the two joints **a** on both sides.

ATTENTION: When reattaching, fit the clamper to the two joints **a**.

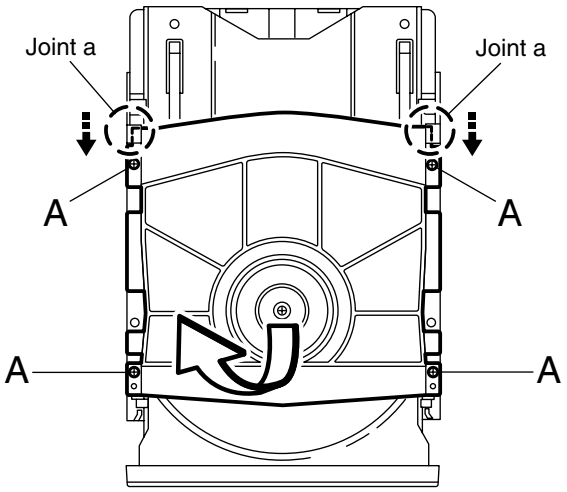


Fig.1

■ Removing the tray (See Fig.2 and 3)

・ Prior to performing the following procedure, remove the clamper assembly.

1. Push **b** of the slide cam into the slot on the left side of the loading base until it stops.

2. Draw out the tray toward the front.

ATTENTION: Before reattaching the tray, slide the part **c** of the slide cam to the right as shown in Fig.3.

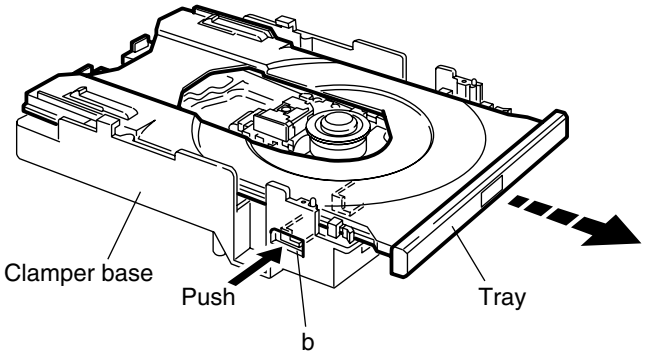


Fig.2

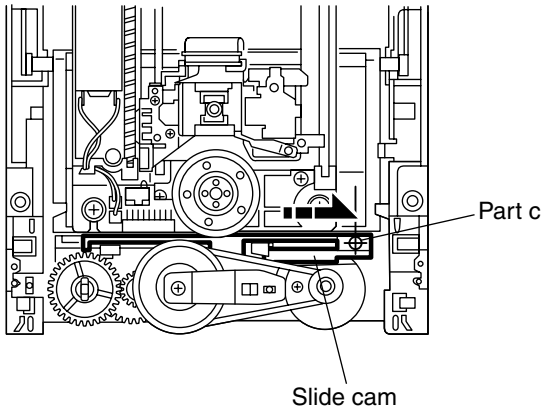


Fig.3

■Removing the traverse mechanism assembly (See Fig.4 and 5)

・ Prior to performing the following procedure, remove the clamper assembly and the tray.

1. Remove the four screws **B** attaching the traverse mechanism assembly.

ATTENTION: Before reattaching the traverse mechanism assembly, pass the card wire extending from the spindle motor board through the notch **d** of the elevator.

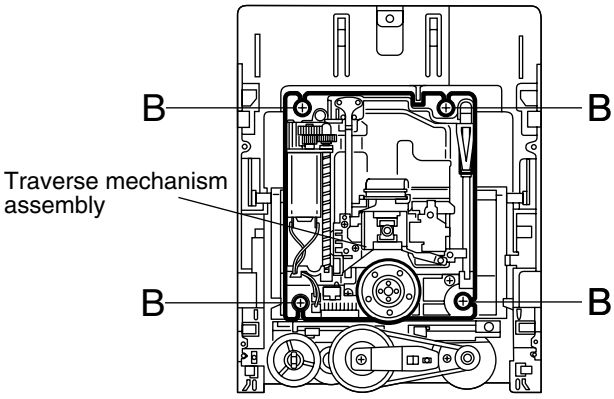


Fig.4

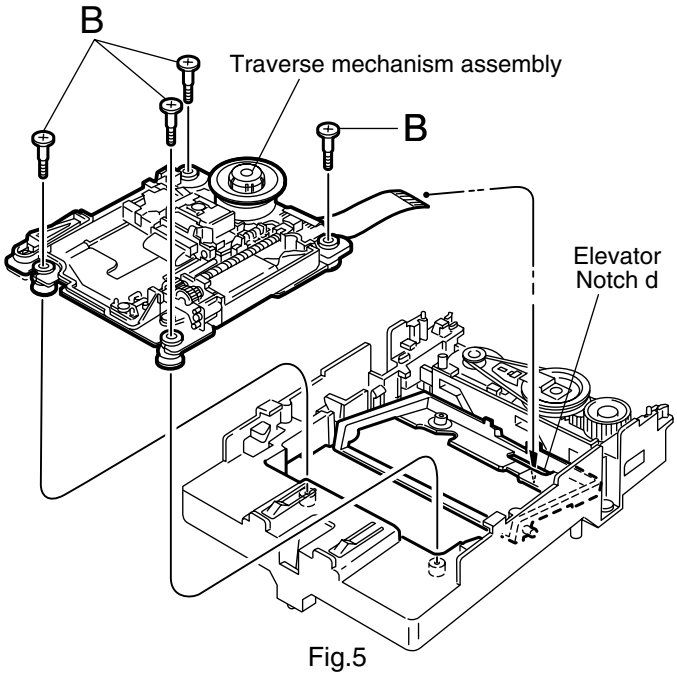


Fig.5

■Removing the elevator (See Fig.6 and 7)

・ Prior to performing the following procedure, remove the clamper assembly, the tray and the traverse mechanism assembly.

1. Extend each bar **e** inside of the loading base outward and detach the elevator shaft.

ATTENTION: When reattaching, first fit the two shafts on the front of the elevator to the slots **f** of the slide cam.

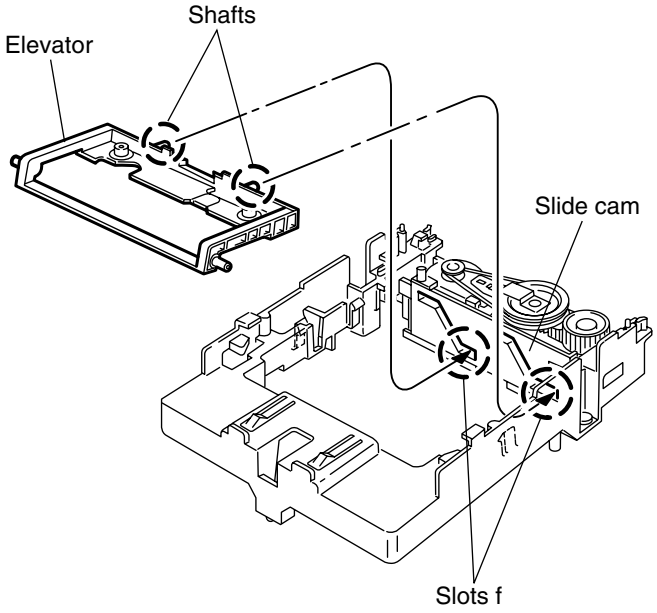


Fig.7

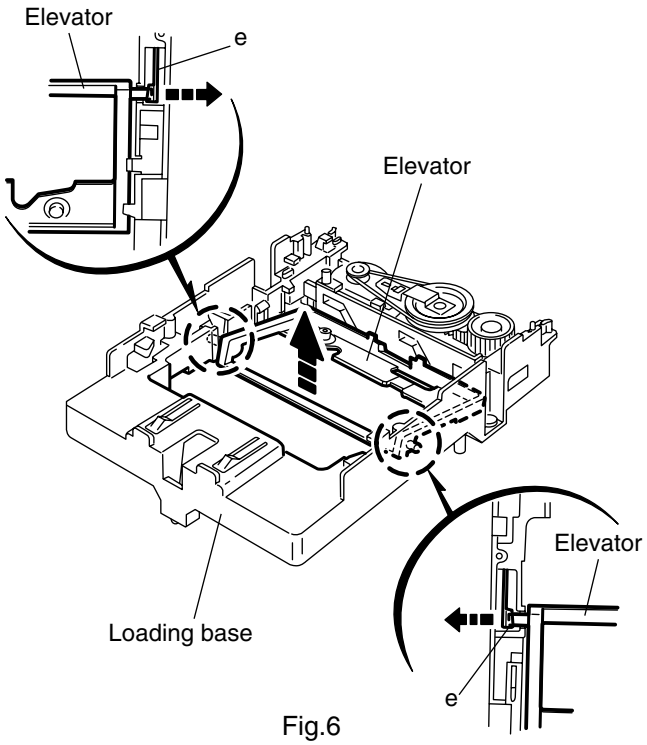


Fig.6

■ Removing the motor assembly (See Fig.8 and 9)

- Prior to performing the following procedure, remove the clamper assembly, the tray, the traverse mechanism assembly and the elevator.

1. Remove the belt from the pulley.
2. Remove the screw **C** attaching the motor assembly.
3. Turn over the body and remove the screw **D** attaching the motor assembly.
4. Release the two tabs **g** retaining the motor board.

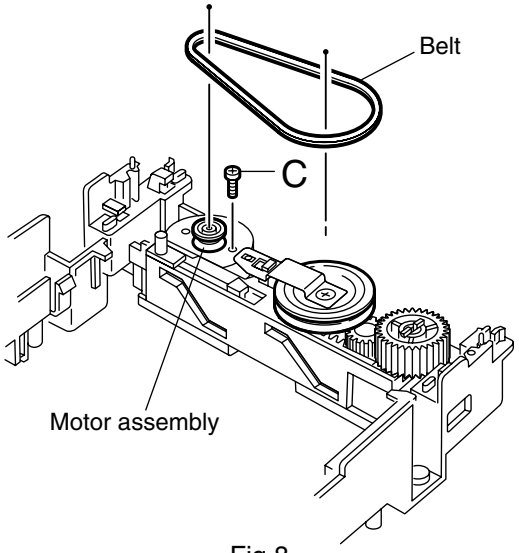


Fig.8

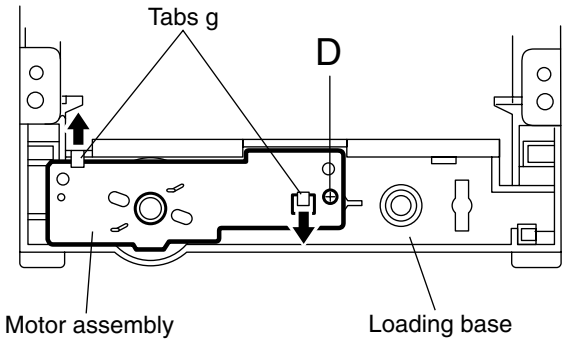


Fig.9

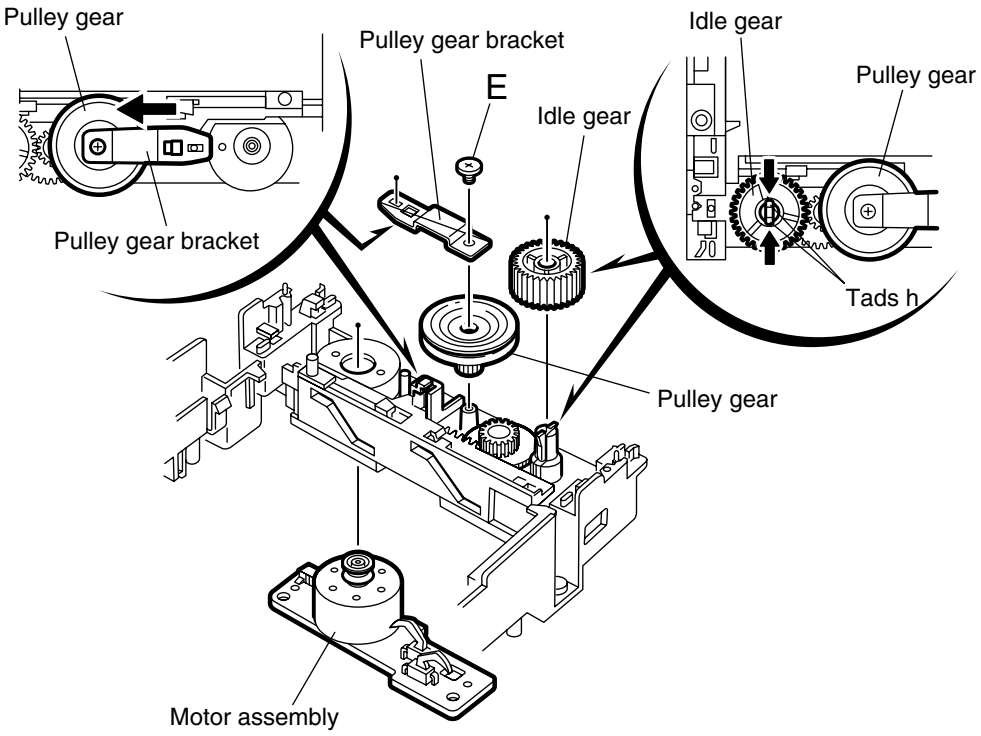


Fig.10

■Removing the Idle gear / pulley gear / middle gear / slide cam (See Fig.10 to 12)

・ Prior to performing the following procedure, remove the clamper assembly, the tray, the traverse mechanism assembly, the elevator and the motor assembly.

1. Press the two tabs **h** inward and pull out the idle gear.

2. Remove the screw **E** attaching the pulley gear bracket. Slide the pulley gear bracket in the direction of the arrow and pull out the pulley gear.

3. Slide the slide cam in the direction of the arrow to release the two joints **i** and remove upward.

4. Remove the middle gear.

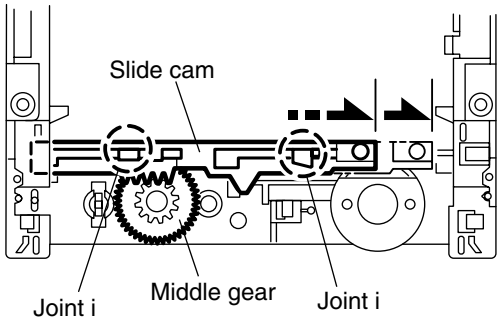


Fig.11

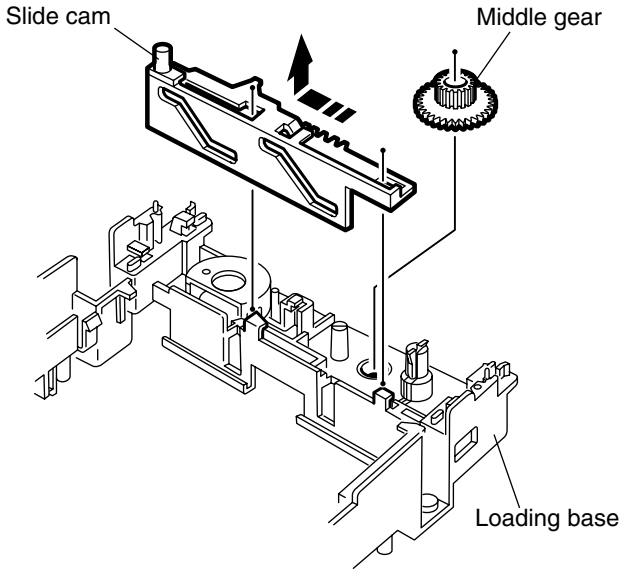


Fig.12

<Traverse mechanism assembly section>

■ Removing the feed motor assembly (See Fig.13)

1. Unsolder the two soldering **j** on the spindle motor board.

2. Remove the two screws **F** attaching the feed motor assembly.

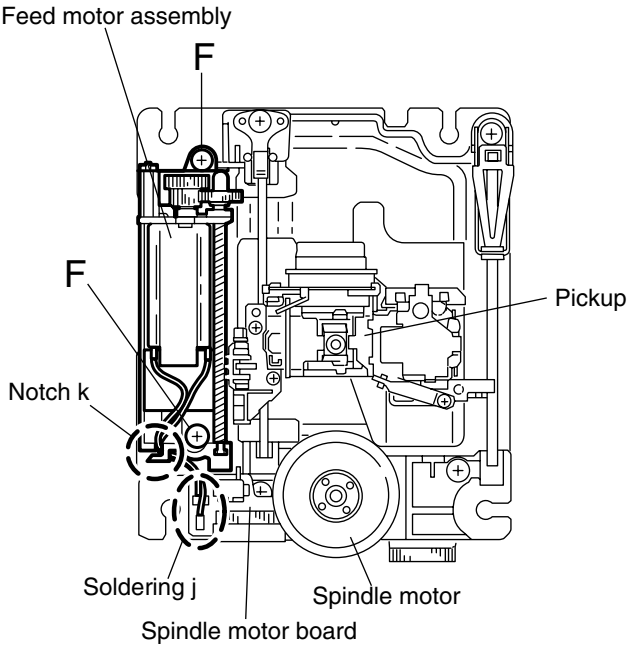


Fig.13

■ Removing the feed motor (See Fig.13 to 15)

・ Prior to performing the following procedure, remove the feed motor assembly.

1. Remove the screw **G** attaching the thrust spring.

ATTENTION:	When reattaching the thrust spring, make sure that the thrust spring presses the feed gear (M) and the feed gear (E) reasonably.

2. Remove the feed gear (M).

3. Pull out the feed gear (E) and the lead screw.

4. Remove the two screws **H** attaching the feed motor.

ATTENTION:	When reattaching, pass the two cables extending from the feed motor through the notch **k** of the feed holder as shown in Fig.13.

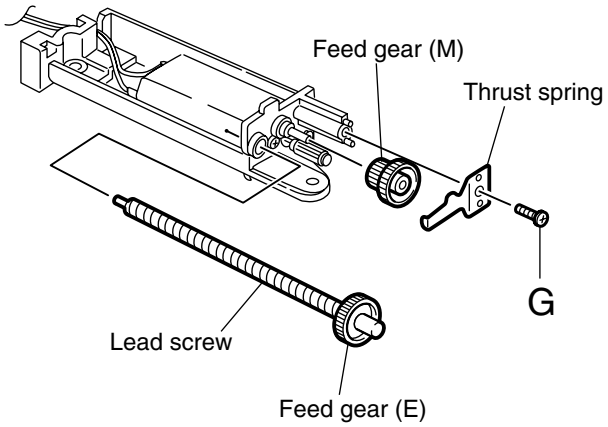


Fig.14

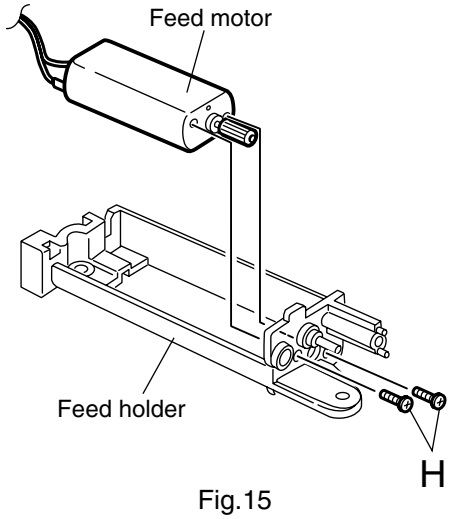


Fig.15

■ Removing the pickup (See Fig.16 and 17)

1. Remove the screw **I** attaching the T spring (S) and the shaft holder. Remove also the plate.

ATTENTION: When reattaching, make sure that the T spring (S) presses the shaft.

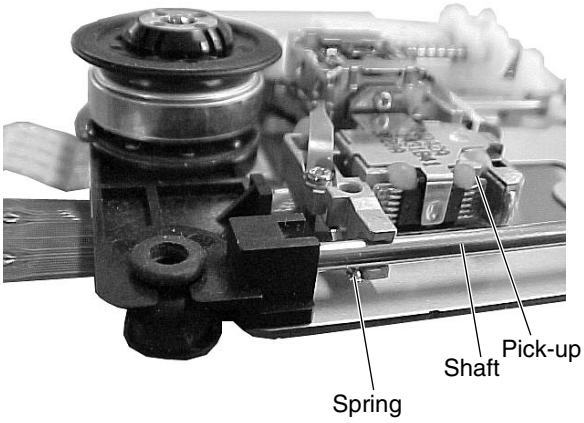
2. Pull out the part **l** of the shaft upward. Move the part **m** in the direction of the arrow and detach from the spindle base.

3. Disengage the joint **n** of the pickup and the shaft in the direction of the arrow.

4. Pull out the shaft from the pickup.

5. Remove the two screws **J** attaching the actuator.

6. Disengage the joint of the actuator and the lead spring. Pull out the lead spring.



The spring must be under the shaft when you install pick-up.

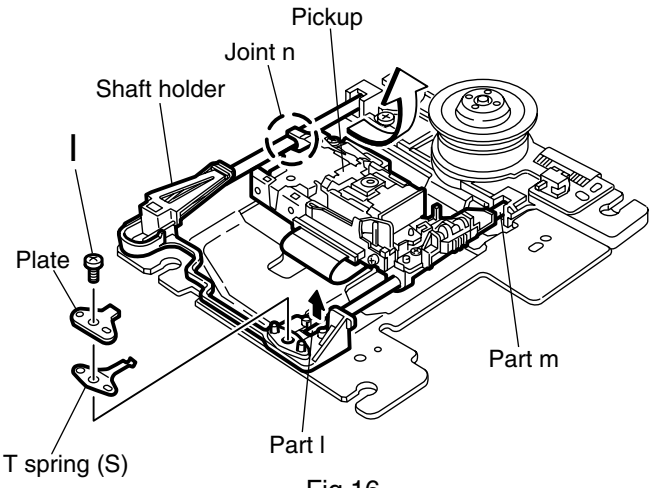


Fig.16

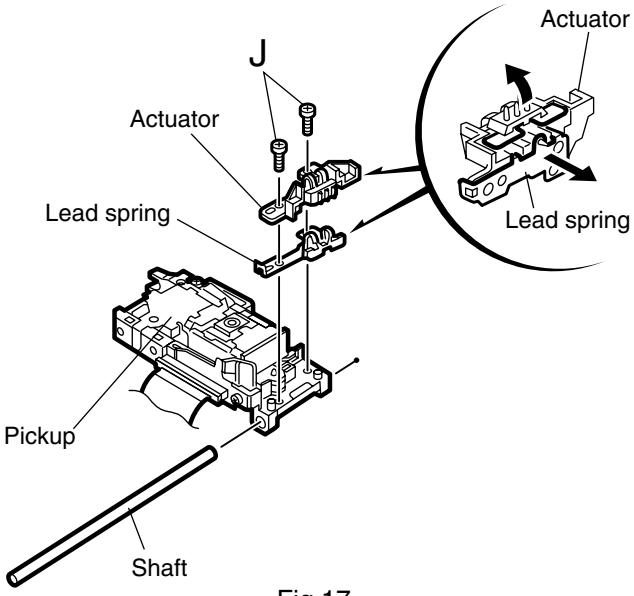


Fig.17

■ Removing the shaft holder / shaft (See Fig.18)

1. Remove the screw **K** attaching the shaft holder.

2. Remove the shaft.

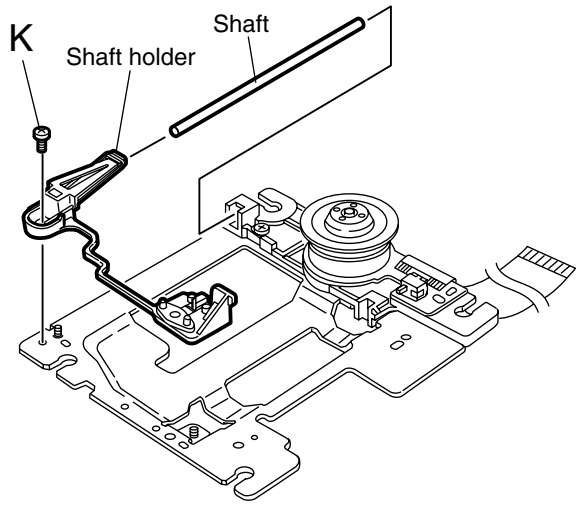


Fig.18

■ Removing the spindle motor assembly (See Fig.19 to 21)

1. Remove the three screws **L** attaching the spindle motor on the bottom of the mechanism base.

ATTENTION: When reattaching, pass the card wire extending from the spindle motor board through the notch of the spindle base.

2. Remove the three screws **M** attaching the spindle base.

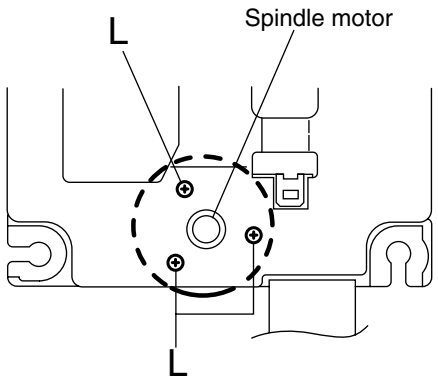


Fig.19

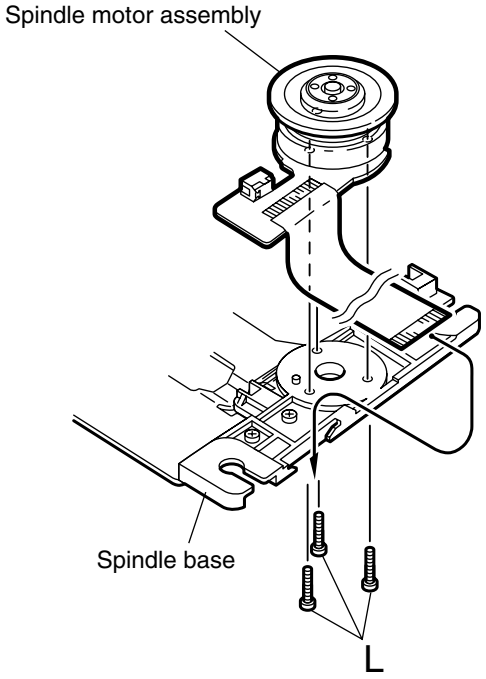


Fig.20

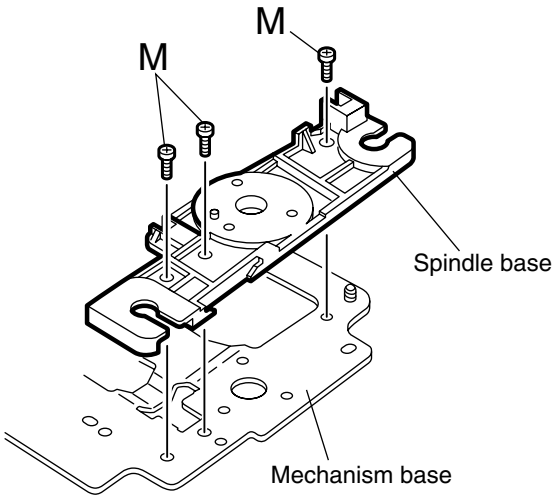


Fig.21

Adjustment method

(1) Initialization method

If microprocessor (IC401,IC402,IC403) or pick-up is replaces, initialize the DVD player in the following matter

1)Take out the disc and close the tray.
2)Unplug the power plug.
3)Insert power plug into outlet while pressing both "PLAY" button and "OPEN/CLOSE" button.
4)FL Display indicate "TEST ＊＊　¥" .　＊＊:Version,　¥:Region code
5)Press "3D-PHONIC" button of remote controller. and EEPROM initialize start.
6)When indicate "DTS" on the display, initialize finishes.
7)The power is turned OFF, and Unplug the power plug.

(2) Display of "Laser current value" and "Jitter value"

"Laser current value" and "Jitter value" are displayed on the FL display by the undermentioned method. Please refer to the failure diagnosis.

1)Take out the disc and close the tray.
2)Unplug the power plug.
3)Insert power plug into outlet while pressing both "PLAY" button and "OPEN/CLOSE" button.
4)FL Display indicate "TEST ＊＊　¥" .　＊＊:Version,　¥:Region code
5)Press the "OPEN/CLOSE" button to move the tray outward.
Put the test disc (VT-501) on the tray and press "OPEN/CLOSE" button.
The tray should move inward (Note:Don't push to close the tray directly by hand etc.)
6)Press the "PLAY" button.
7)The laser current value and the jitter value is displayed on the FL indicator as follows.

FL Display

0 0 4 0	3 9 7 8
Laser current value	Jitter value

* The test mode is canceled when the power is turned off.

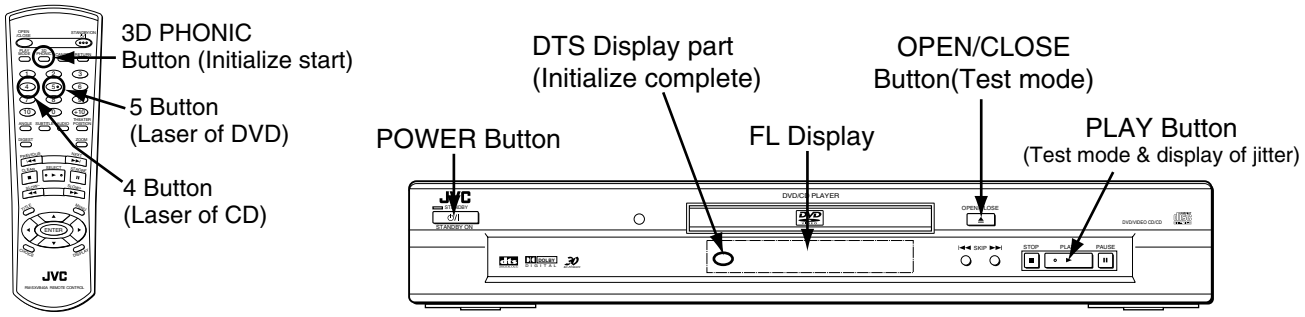
■ For Laser current value

The laser current value becomes 40mA for the above-mentioned.
Becomes a test mode by doing above-mentioned procedure 1) - 4). Afterwards, the laser current value can be switched by pushing the button to remote controller without turning on the disk.

Remote control "4" button --- Laser of CD
Remote control "5" button --- Laser of DVD

*Returns to a usual test mode by the thing to push the "STOP" button of remote controller.

If the laser current value is 64mA or less, it is roughly good. There is a possibility to which pick-up is deteriorated, and exchange pick-up, please when there are 65mA or more laser current value.

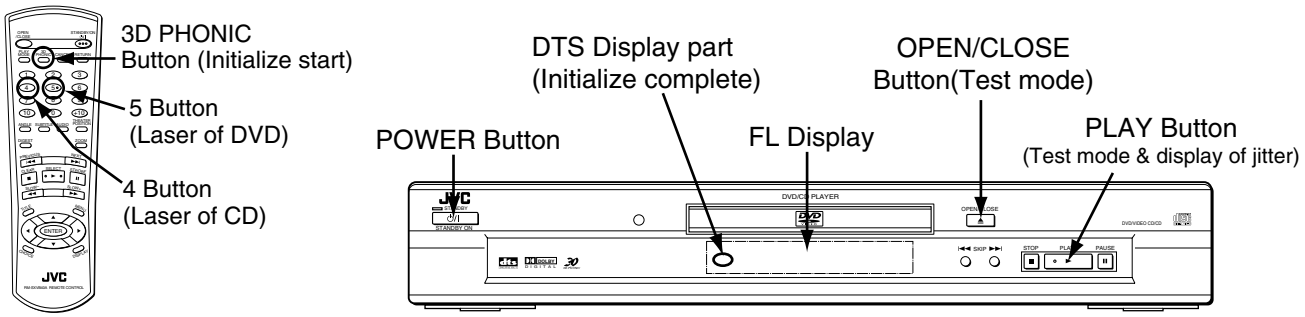


■ For Jitter value

The jitter value is displayed on the FL display referring to the previous page.
The jitter value is displayed by the hexadecimal number.
In the following cases, please "Flap adjustment of the pick-up guide shaft" referring to the following page.
Before using the TEST disc VT-501, careful check it if there is neither damage nor dirt on the read surface.

< In the following cases, please adjustment >

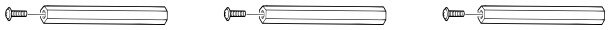
*** When you exchange the pick-up**
*** When you exchange the spindle motor**
*** When the reading accuracy of the signal is bad (There is a block noise in the screen etc..)**



(3) Flap adjustment of the pick-up guide shaft

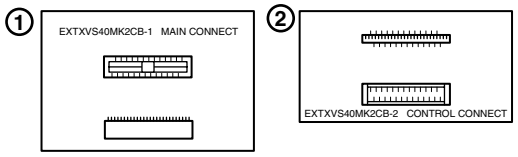
<Tool list for adjustment>

* Hex wrench for adjustment
  Off-the-shelf (1.3mm)
* Test disc
  VT-501 or VT-502
* Stud (four pieces set)
  Parts No. : JIGXVS40 (One is not used though there are four.)

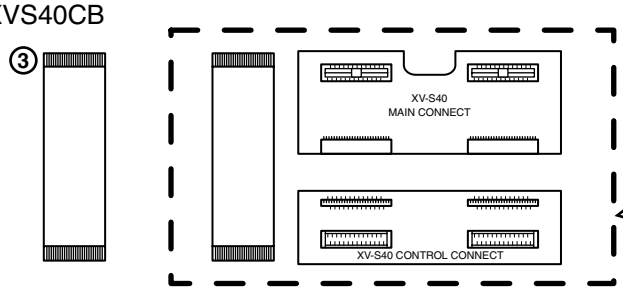


* Assistance board and extension cord

Parts No. : EXTXVS40MK2CB

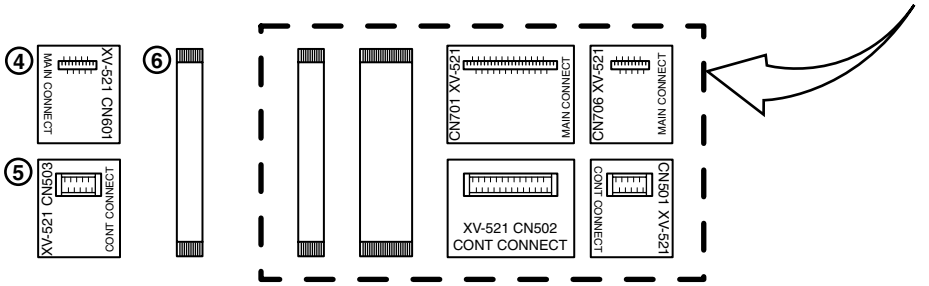


Parts No. : EXTXVS40CB

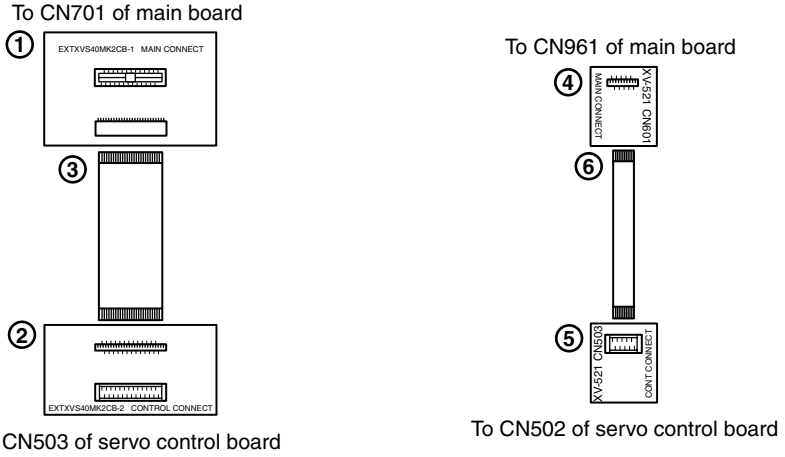


These parts are not used.

Parts No. : EXTXV521CB

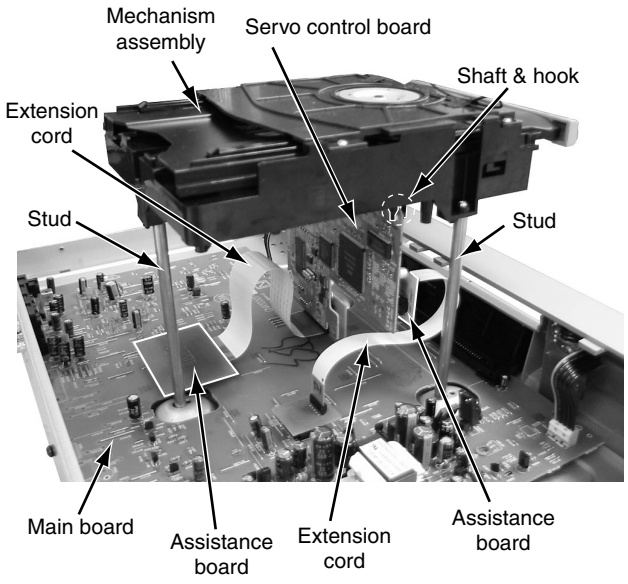


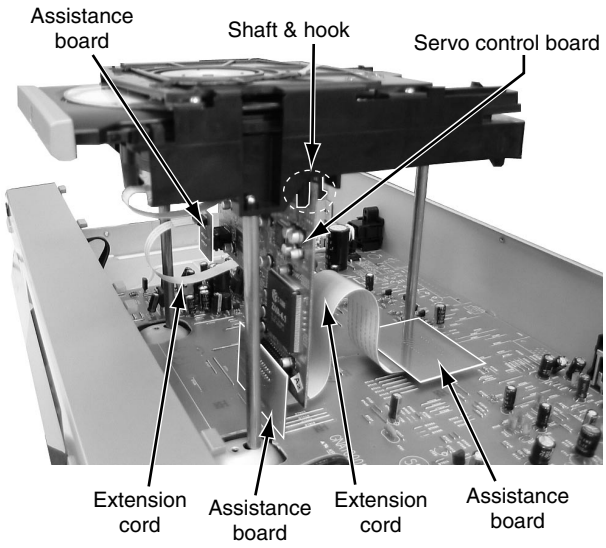
<Connection diagram>



<Adjustment preparation>

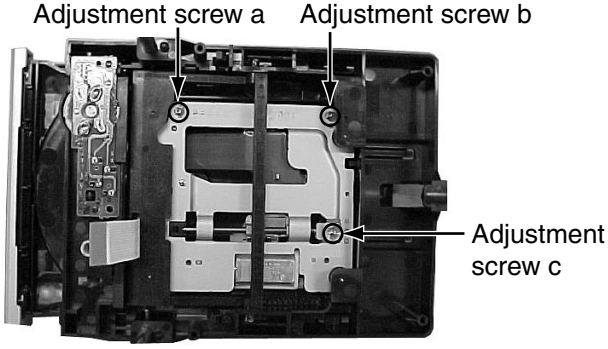
1.The mechanism assembly is made in the state from the main body from which is detached referring to the disassembly method.
2.Three studs are installed in the mechanism assembly respectively.
3.The servo control board is removed from the mechanism assembly, and puts into the state set up as shown in figure. (Each wire connected by the servo control board this time leaves the connection maintained.) Between shaft and hook of mechanism assembly of figure Board is put.
4.The extension cord is inserted in the connector of the assistance board respectively. The main board is connected with the servo control board as shown in figure.





<Adjustment>

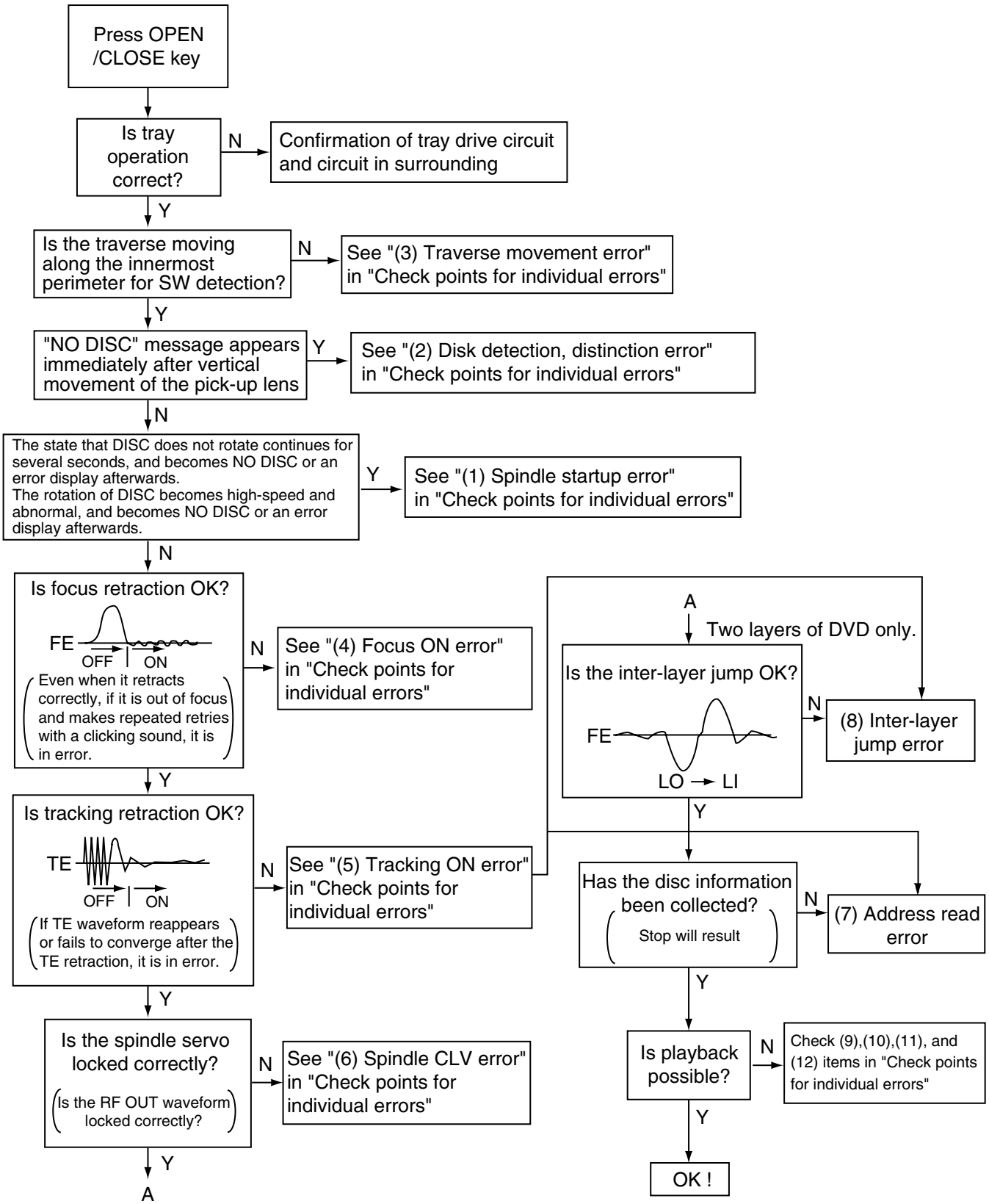
1.Puts into the state to display the jitter value on the FL display referring to "Display of the jitter value".
2.The adjustment screw under the traverse mechanism is turned with hex wrench, and matches so that the jitter value displayed on the FL display may become **"maximum"** value.



<POINT>
1.Turns in the forward or the opposite direction, and makes to the position where the jitter value is good the half rotation of adjustment screw a and b(180 degrees) respectively.
2.Afterwards, adjustment screw b and c are turned in the same way, and makes to the best position.

Troubleshooting

Servo volume


Press OPEN /CLOSE key
Is tray operation correct?
N
Confirmation of tray drive circuit and circuit in surrounding
Y
Is the traverse moving along the innermost perimeter for SW detection?
N
See "(3) Traverse movement error" in "Check points for individual errors"
Y
"NO DISC" message appears immediately after vertical movement of the pick-up lens
Y
See "(2) Disk detection, distinction error" in "Check points for individual errors"
N
The state that DISC does not rotate continues for several seconds, and becomes NO DISC or an error display afterwards.
The rotation of DISC becomes high-speed and abnormal, and becomes NO DISC or an error display afterwards.
Y
See "(1) Spindle startup error" in "Check points for individual errors"
N
Is focus retraction OK?
FE
OFF
ON
Even when it retracts correctly, if it is out of focus and makes repeated retries with a clicking sound, it is in error.
N
See "(4) Focus ON error" in "Check points for individual errors"
Y
Is tracking retraction OK?
TE
OFF
ON
If TE waveform reappears or fails to converge after the TE retraction, it is in error.
N
See "(5) Tracking ON error" in "Check points for individual errors"
Y
Is the spindle servo locked correctly?
Is the RF OUT waveform locked correctly?
N
See "(6) Spindle CLV error" in "Check points for individual errors"
Y
A
A
Two layers of DVD only.
Is the inter-layer jump OK?
FE
LO → LI
N
(8) Inter-layer jump error
Y
Has the disc information been collected?
Stop will result
N
(7) Address read error
Y
Is playback possible?
N
Check (9),(10),(11), and (12) items in "Check points for individual errors"
Y
OK !

Check points for each error

(1) Spindle start error

1.Defective spindle motor

*Are there several ohms resistance between each pin of CN201 "5-6","6-7","5-7"?
(The power supply is turned off and measured.)

*Is the sign wave of about 100mVp-p in the voltage had from each terminal?
[CN201"9"(H1-),"10"(H1+),"11"(H2-),"12"(H2+),"13"(H3-),"14"(H3+)]

2.Defective spindle motor driver (IC251)

*Has motor drive voltage of a sine wave or a rectangular wave gone out to each terminal(SM1~3)
of CN201"5,6,7" and IC251"2,4,7"?

*Is FG pulse output from the terminal of IC251"24"(FG) according to the rotation of the motor?

*Is it "L(about 0.9V)" while terminal of IC251"15"(VH) is rotating the motor?

3.Has the control signal come from servo IC or the microcomputer?

*Is it "L" while the terminal of IC251"18"(SBRK) is operating?
Is it "H" while the terminal of IC251"23"(/SPMUTE) is operating?

*Is the control signal input to the terminal of IC251"22"(EC)?
(changes from VHALF voltage while the motor is working.)

*Is the VHALF voltage input to the terminal of IC251"21"(ECR)?

4.Is the FG signal input to the servo IC?

*Is FG pulse input to the terminal of IC301"69"(FG) according to the rotation of the motor?

(2) Disc Detection, Distinction error (no disc, no RFENV)

* Laser is defective.
* Front End Processor is defective (IC101).
* APC circuit is defective. --- Q101,Q102.
* Pattern is defective. --- Lines for CN101 - All patterns which relate to pick-up and patterns between IC101
* IC101 --- For signal from IC101 to IC301, is signal output from IC101 "20" (ASOUT) and
IC101 "41"(RFENV) and IC101 "22" (FEOUT)?

(3) Traverse movement NG

1.Defective traverse driver
*Has the voltage come between terminal of CN101 "1" and "2" ?

2.Defective BTL driver (IC201)
*Has the motor drive voltage gone out to IC201"17" or "18"?

3.Has the control signal come from servo IC or the microcomputer?
*Is it "H" while the terminal of IC201"9"(STBY1) ?
*TRSDRV Is the signal input? (IC301 "67")

4.TRVSW is the signal input from microcomputer? (IC401 "46")

(4) Focus ON NG

* Is FE output ? --- Pattern, IC101
* Is FODRV signal sent ? (R209) --- Pattern, IC301 "115"
* Is driving voltage sent ?
  IC201 "13", "14" --- If NG, pattern, driver, mechanical unit .
* Mechanical unit is defective.

(5) Tracking ON NG

* When the tracking loop cannot be drawn in, TE shape of waves does not settle.
* Mechanical unit is defective.
  Because the self adjustment cannot be normally adjusted, the thing which cannot be normally drawn in is thought.
* Periphery of driver (IC201)
  Constant or IC it self is defective.
* Servo IC (IC301)
  When improperly adjusted due to defective IC.

(6) Spindle CLV NG

* IC101 -- "35"(RF OUT), "30"(ARF-), "31(ARF+).
* Does not the input or the output of driver's spindle signal do the grip?
* Has the tracking been turned on?
* Spindle motor and driver is defective.
* Additionally, "IC101 and IC301" and "Mechanism is defective(jitter)", etc. are thought.

(7) Address read NG

* Besides, the undermentioned cause is thought though specific of the cause is difficult because various factors are thought.
  Mechanism is defective. (jitter)
  IC301, IC401.
  The disc is dirty or the wound has adhered.

(8) Between layers jump NG (double-layer disc only)

Mechanism defective
Defect of driver's IC(IC201)
Defect of servo control IC(IC301)

(9) Neither picture nor sound is output

1.It is not possible to search
*Has the tracking been turned on?
*To "(5) Tracking ON NG" in "Check points for each error" when the tracking is not normal.
*Is the feed operation normal?
To "(3) traverse movement NG" in "Check points for each error" when it is not normal.
Are not there caught of the feeding mechanism etc?

(10) Picture is distorted or abnormal sound occurs at intervals of several seconds.

Is the feed operation normal?
Are not there caught of the feeding mechanism etc?

(11) Others

The image is sometimes blocked, and the image stops.
The image is blocked when going to outer though it is normal in surroundings in the disk and the stopping symptom increases.

} There is a possibility with bad jitter value for such a symptom.

(12) CD During normal playback operation

a) Is TOC reading normal?
Displays total time for CD-DA.
Shifts to double-speed mode for V-CD.

↓ YES

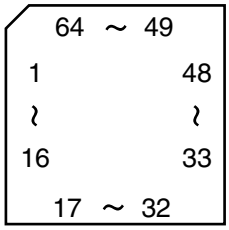
b)Playback possible? → NO

*--:-- is displayed during FL search.
According to [It is not possible to search] for DVD(9), check the feed and tracking systems.
*No sound is output although the time is displayed.(CA-DA)
DAC, etc, other than servo.
*The passage of time is not stable, or picture is abnormal.(V-CD)
*The wound of the disc and dirt are confirmed.

Description of major ICs

■ AN8703FH-V (IC101) : Frontend processor

1.Pin layout

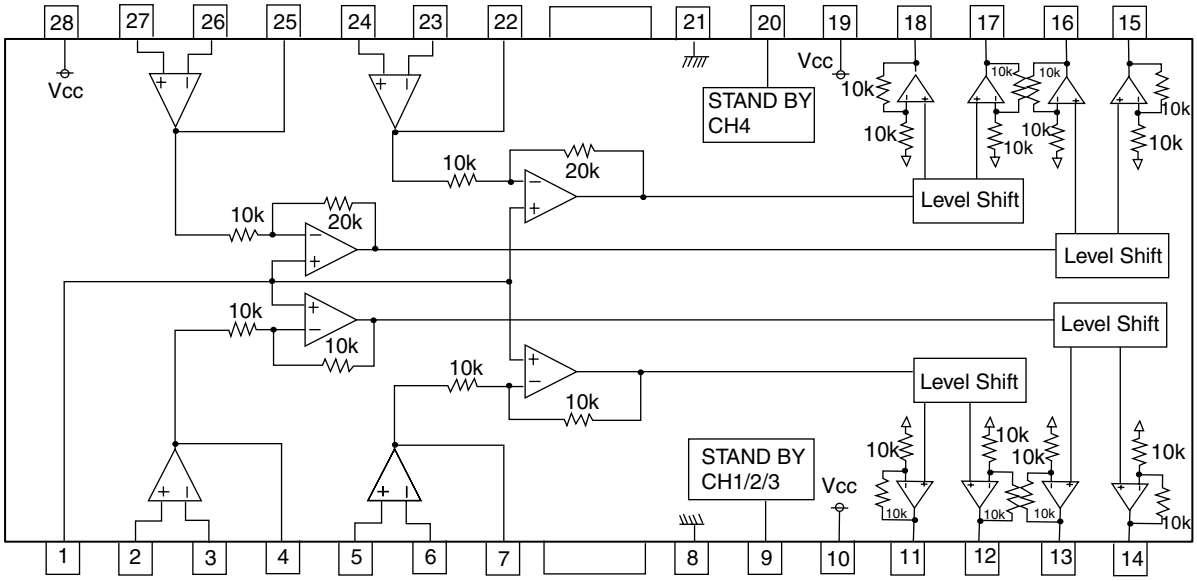


2.Pin function

Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	LPC1	I	Laser input terminal (DVD)	34	RFDIFO	-	Non connect
2	LPC01	O	Laser drive signal output terminal (DVD)	35	RFOUT	-	Connect to TP103
3	LPC2	I	Laser input terminal (CD)	36	VCC3	-	Power supply terminal 3.3V
4	LPC02	O	Laser drive signal output terminal (CD)	37	RFC	O	Filter for RF delay correction AMP.
5	VFOSHORT	I	VFOSHORT control terminal	38	DCRF	O	All addition amplifier capacitor terminal
6	TBAL	I	Tracking balance control terminal	39	OFTR	O	OFTR output terminal
7	FBAL	I	Focus balance control terminal	40	BDO	O	BDO output terminal
8	POFLT	O	Track detection threshold level terminal	41	RFENV	O	RF envelope output terminal
9	DTRD	I	Data slice part data read signal input terminal (For RAM)	42	BOTTOM	O	Bottom envelope detection filter terminal
				43	PEAK	O	Peak envelope detection filter terminal
10	IDGT	I	Data slice part address part gate signal input terminal(For RAM)	44	AGCG	O	AGC amplifier gain control terminal
				45	AGCO	O	AGC amplifier level control terminal
11	STANDBY	I	Standby mode control terminal	46	TESTSG	I	TEST signal input terminal
12	SEN	I	SEN(Serial data input terminal)	47	RFINP	I	RF signal positive input terminal
13	SCK	I	SCK(Serial data input terminal)	48	RFINN	I	RF signal negative input terminal
14	STDI	I	STDI(Serial data input terminal)	49	VIN5	I	Internal four-partition (CD) RF input 1
15	RSCL	I	Standard electric current terminal	50	VIN6	I	Internal four-partition (CD) RF input 2
16	JLINE	I	Electric current setting terminal of JLine	51	VIN7	-	Internal four-partition (CD) RF input 3
17	TEN	I	Reversing input terminal of tracking error output AMP.	52	VIN8	-	Internal four-partition (CD) RF input 4
18	TEOUT	O	Tracking error signal output terminal	53	VIN9	I	External two-partition (DVD) RF input 2
19	AGCBAL	I	Offset adjusting terminal 1	54	VIN10	I	External two-partition (DVD) RF input 1
20	ASOUT	O	Full adder signal output terminal	55	VCC1	-	Power supply terminal 5V
21	FEN	I	Focus error output amplifier reversing input terminal	56	VREF1	O	VREF1 voltage output terminal
22	FEOUT	O	Focus error signal output terminal	57	VIN1	I	Internal four-partition (DVD) RF input 1
23	AGCOFST	I	Offset adjusting terminal 2				
24	MON	-	Non connect	58	VIN2	I	Internal four-partition (DVD) RF input 2
25	AGCLVL	O	Output amplitude adjustment for DRC				
26	GND2	-	Connect to GND	59	VIN3	I	Internal four-partition (DVD) RF input 3
27	VREF2	O	VREF2 voltage output terminal				
28	VCC2	-	Power supply terminal 5V	60	VIN4	I	Internal four-partition (DVD) RF input 4
29	VHALF	O	VHALF voltage output terminal				
30	DFLTON	O	Reversing output terminal of filter AMP.	61	GND1	-	Connect to GND
31	DFLTOP	O	Filter AMP. output terminal	62	VIN11	I	3 beam sub input terminal 2 (CD)
32	DCFLT	I	Capacity connection terminal for filter output	63	VIN12	I	3 beam sub input terminal 1 (CD)
33	GND3	-	Connect to GND	64	HDTYPE	O	HD Type selection

■ BA5983FM-X (IC201) : 4CH Driver

1.Block diagram

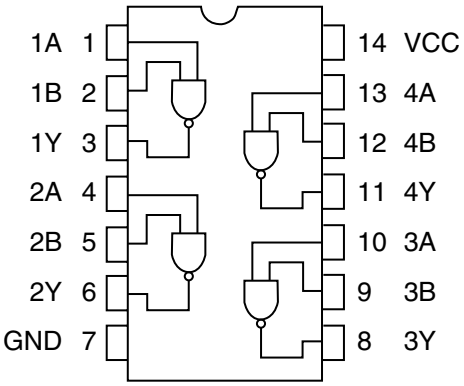


2.Pin function

Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	BIAS IN	I	Input for Bias-amplifier	15	VO4(+)	O	Non inverted output of CH4
2	OPIN1(+)	I	Non inverting input for CH1 OP-AMP	16	VO4(-)	O	Inverted output of CH4
3	OPIN1(-)	I	Inverting input for CH1 OP-AMP	17	VO3(+)	O	Non inverted output of CH3
4	OPOUT1	O	Output for CH1 OP-AMP	18	VO3(-)	O	Inverted output of CH3
5	OPIN2(+)	I	Non inverting input for CH2 OP-AMP	19	PowVcc2	-	Vcc for CH3/4 power block
6	OPIN2(-)	I	Inverting input for CH2 OP-AMP	20	STBY2	I	Input for Ch4 stand by control
7	OPOUT2	O	Output for CH2 OP-AMP	21	GND	-	Substrate ground
8	GND	-	Substrate ground	22	OPOUT3	O	Output for CH3 OP-AMP
9	STBY1	I	Input for CH1/2/3 stand by control	23	OPIN3(-)	I	Inverting input for CH3 OP-AMP
10	PowVcc1	-	Vcc for CH1/2 power block	24	OPIN3(+)	I	Non inverting input for CH3 OP-AMP
11	VO2(-)	O	Inverted output of CH2	25	OPOUT4	O	Output for CH4 OP-AMP
12	VO2(+)	O	Non inverted output of CH2	26	OPIN4(-)	I	Inverting input for CH4 OP-AMP
13	VO1(-)	O	Inverted output of CH1	27	OPIN4(+)	I	Non inverting input for CH4 OP-AMP
14	VO1(+)	O	Non inverted output of CH1	28	PreVcc	-	Vcc for pre block

■ 74VHC00MTC-X (IC455,IC503) : 2-input nand gate

1.Pin layout



(TOP VIEW)

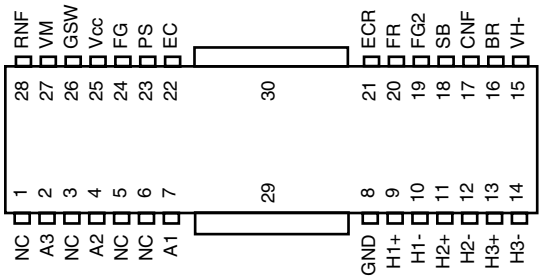
2.Truth table

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

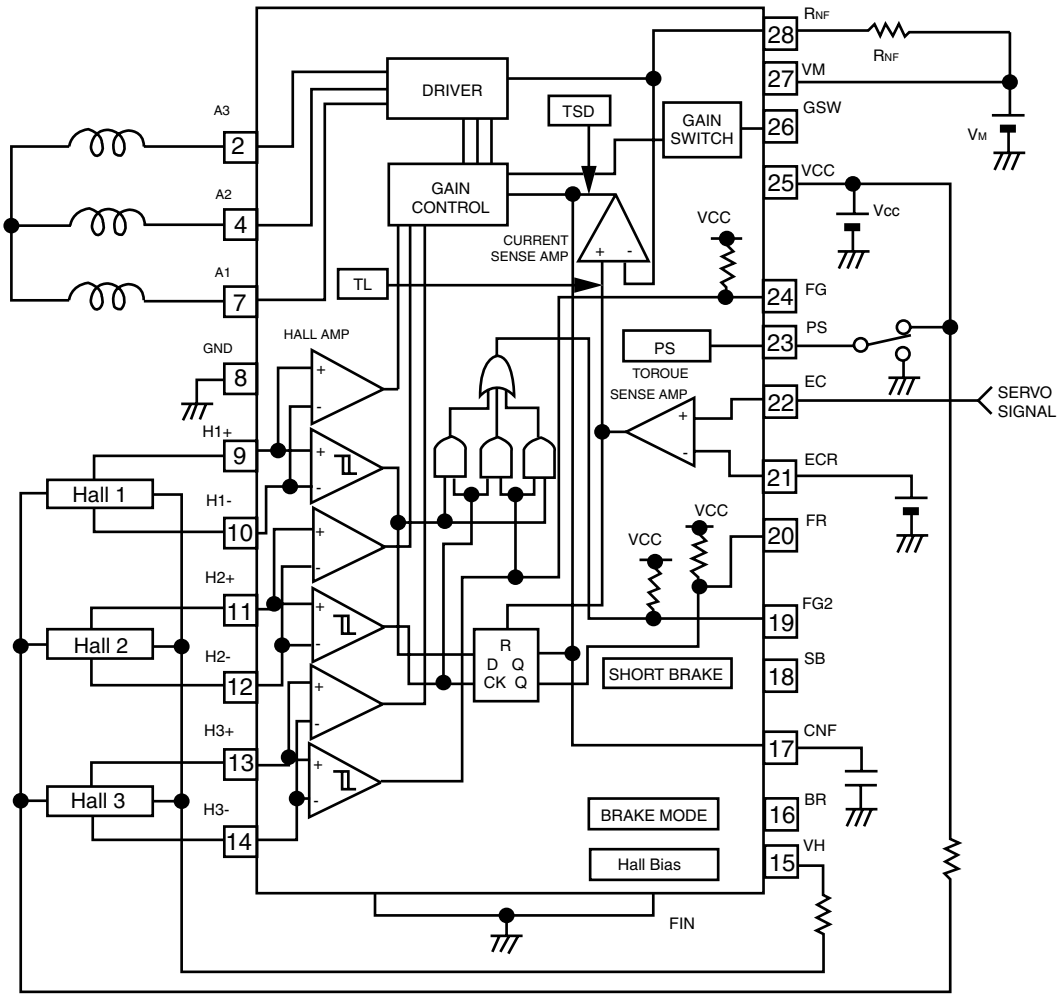
L : High impedance

■ BA6664FM-X (IC251) : 3Phase Motor Driver

1.Pin layout



2.Block diagram



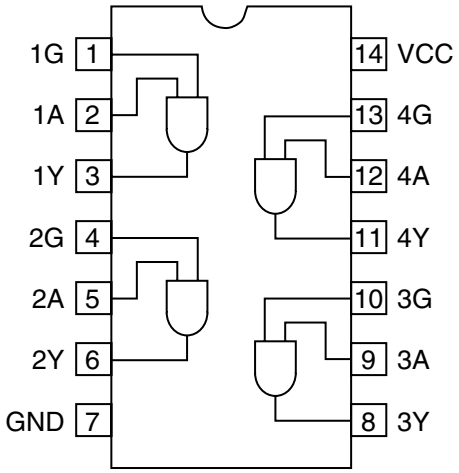
3.Pin function

BA6664FM-X

Pin No.	Symbol	I/O	Description
1	NC	-	Non connect
2	A3	O	Output 3 for spindle motor
3	NC	-	Non connect
4	A2	O	Output 2 for spindle motor
5	NC	-	Non connect
6	NC	-	Non connect
7	A1	O	Output 1 for spindle motor
8	GND	-	Connect to ground
9	H1+	I	Positive input for hall input AMP 1
10	H1-	I	Negative input for hall input AMP 2
11	H2+	I	Positive input for hall input AMP 2
12	H2-	I	Negative input for hall input AMP 2
13	H3+	I	Positive input for hall input AMP 3
14	H3-	I	Negative input for hall input AMP 3
15	VH	I	Hall bias terminal
16	BR	-	Non connect
17	CNF	-	Capacitor connection pin for phase compensation
18	SB	I	Short brake terminal
19	FG2	-	Non connect
20	FR	-	Non connect
21	ECR	I	Torque control standard voltage input terminal
22	EC	I	Torque control voltage input terminal
23	PS	O	Start/stop switch (power save terminal)
24	FG	O	FG signal output terminal
25	VCC	-	Power supply for signal division
26	GSW	O	Gain switch
27	VM	-	Power supply for driver division
28	RNF	O	Resistance connection pin for output current sense
29		-	Connect to ground
30		-	Connect to ground

■ 74VHC08SJ-X(IC411) / 74VHCT08ASJ-X(IC412):2-input AND gate

1.Pin layout

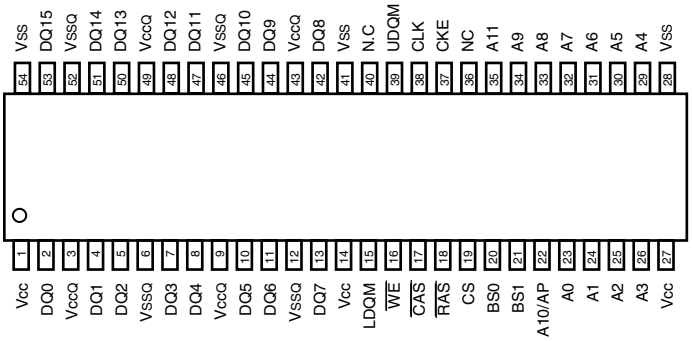


2.Truth table

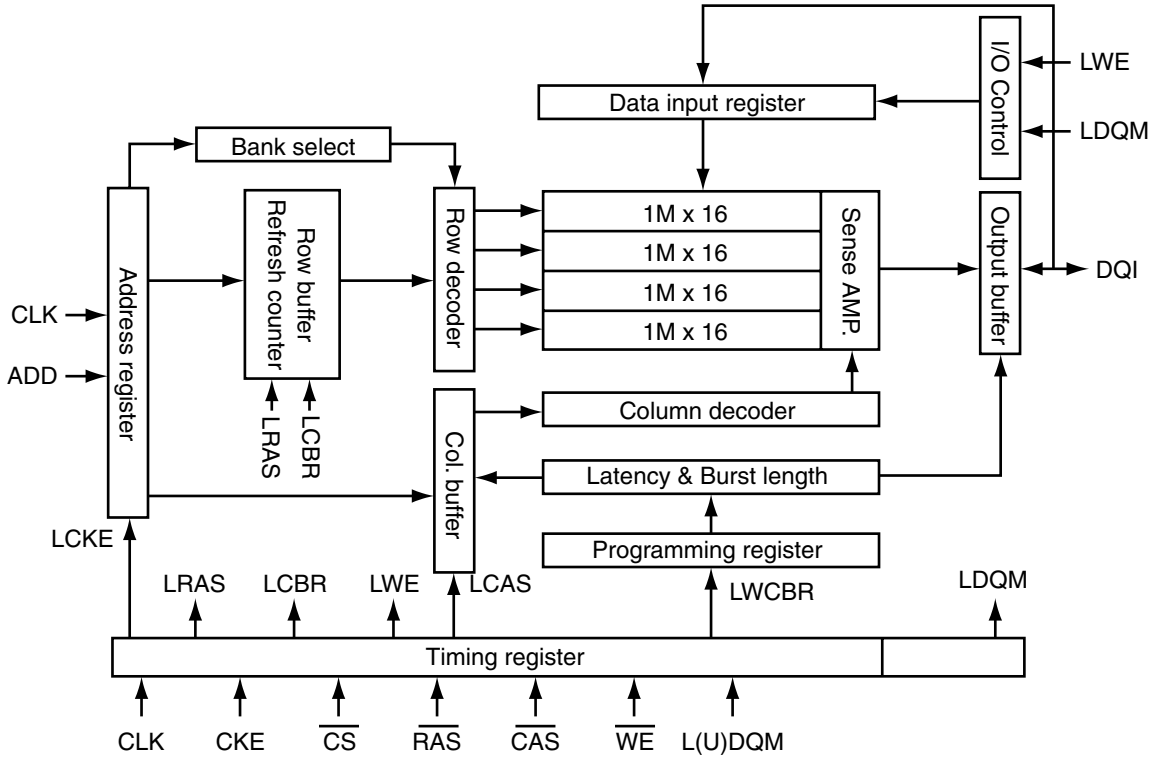
G	A	Y
L	L	Z
L	H	Z
H	L	Z
H	H	L

■ K4S641632E-TC75 (IC504) :CMOS SDRAM

1.Pin layout



2.Block diagram



3.Pin functions

Symbol	Description
CLK	System clock
$\overline{CS}$	Chip select
CKE	Clock enable
A0~A11	address
BS0,1	Bank address strobe
$\overline{RAS}$	Row address strobe
$\overline{CAS}$	column address strobe
$\overline{WE}$	Write enable
LDQM	Data input/output mask
DQ0~15	Data input/output
Vcc/Vss	Power supply/ground
Vccq/Vssq	Data output power/ground
N.C	Non connect

■ MN101C35DGN(IC701):System controller

Pin function

Pin No.	Symbol	I/O	Description
1	DDATA	O	DAC control data
2	DCLK	O	DAC control clock
3	DACOCS	O	DAC control chip select
4~7	DI/DO/CS/SK	-	Not use
8	VDD	-	Power supply +B 5V
9	OSC2	O	Oscillation terminal 8MHz
10	OSC1	I	Oscillation terminal 8MHz
11	VSS	-	Connect to ground
12	XI	-	Unused, Connect with ground
13	XO	-	Non connect
14	MMOD	-	Connect to ground
15	VREF-	-	Connect to ground
16	POWER SW	I	Key input (power)
17	NTSEL	I	NTSC/PAL switch input
18	RGB/YC SW	I	RGB/YC Switch input
19	S/COMPO	I	S/COMPONENT Switch input
20	AIN0	I	Key input (S831~S835)
21	AIN2	I	Key input (open/close)
22	TEST0	-	Not used
23	TEST1	-	Not used
24	VREF+	-	Power supply +B 5V
25	RGBSEL	O	RGB select control (H:RGB L:other)
26	RESET	I	Reset input
27	AVCO	O	AV COMPULINK output
28	AVCI	I	AV COMPULINK input
29	POWERON	O	Power ON output
30	TCLOSE	O	Tray close control output
31	TOPEN	O	Tray open control output
32	/LMMUTE	O	Tray muting output (L:muting)
33	SWOPEN	I	Detection switch of tray open/close (L:open/close)
34	SWUPDN	I	Detection switch of traverse mechanism up/down (H:UP L:DOWN)
35	REMO	I	Remote control interruption
36	NC	-	Non connect
37	REQ	I	Communication between unit microcomputers request
38	NC	-	Non connect
39	S2UDT	O	Communication between unit microcomputers DATA output
40	U2SDT	I	Communication between unit microcomputers DATA input
41	SCLK	O	Communication between unit microcomputers CLK
42	BUSY	O	Communication between unit microcomputers BUSY
43	CPURST	O	Unit microcomputers reset
44	NC	-	Non connect
45	VS3	O	S3 control (H:standby L:power ON)
46	VS1	O	S1 control
47	MUTE	O	Muting output
48	STANDBYIND	O	LED control signal output (standby)
49~51	NC	-	Non connect
52~64	13G~1G	O	FL grid control signal output
65~88	S24~S1	O	FL segment control signal output
89~99	NC	-	Non connect
100	VPP	-	-VDISP (apply -35V)

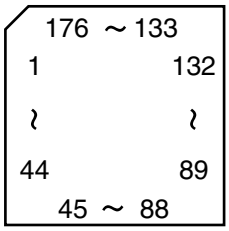
■ MN102L62GGY (IC401) : Unit CPU

Pin function

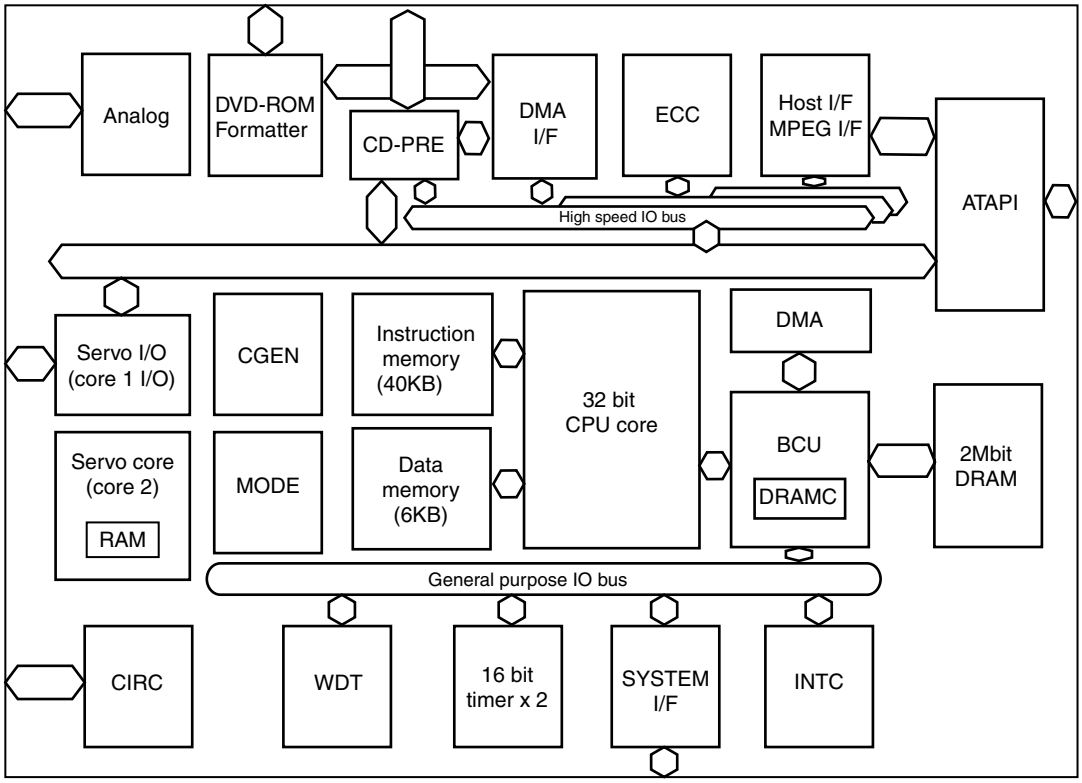
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	WAIT	I	Micon wait signal input	51	-	-	Connect to TP406
2	RE	O	Read enable	52	-	-	Connect to TP405
3	SPMUTE	O	Spindle muting output to IC251	53	P85/TM5IO	-	Connect to TP404
4	WEN	O	Write enable	54	VDD	-	Power supply
5	HDTYPE	O	HD Type selection	55	-	-	Connect to TP403
6	CS1	O	Chip select for ODC	56	FEPEN	O	Serial enable signal for FEP
7	CS2	O	Chip select for ZIVA	57	SLEEP	O	Standby signal for FEP
8	CS3	O	Chip select for outer ROM	58	-	-	Connect to TP402
9	DRVMUTE	O	Driver mute	59	BUSY	I	Communication busy
10	SBRK	O	Short brake terminal	60	REQ	O	Communication request
11	LSIRST	O	LSI reset	61	VSS	-	Ground
12	WORD	I	Bus selection input	62	EPCS	O	EEPROM chip select
13	A0	O	Address bus 0 for CPU	63	EPSK	O	EEPROM clock
14	A1	O	Address bus 1 for CPU	64	EPDI	I	EEPROM data input
15	A2	O	Address bus 2 for CPU	65	EPDO	O	EEPROM data output
16	A3	O	Address bus 3 for CPU	66	VDD	-	Power supply
17	VDD	-	Power supply	67	SCLKO	O	Communication clock
18	SYSCLK	-	Non connect	68	S2UDT	I	Communication input data
19	VSS	-	Ground	69	U2SDT	O	Communication output data
20	XI	-	Not use (Connect to vss)	70	CPSCK	O	Clock for ADSC serial
21	XO	-	Non connect	71	P74/SBI1	I	Not use (Pull down)
22	VDD	-	Power supply	72	SDOUT	O	ADSC serial data output
23	OSCI	I	Clock signal input(13.5MHz)	73	-	I	Not use (Pull up)
24	OSCO	O	Clock signal output(13.5MHz)	74	-	I	Not use (Pull up)
25	MODE	I	CPU Mode selection input	75	NMI	I	NMI Terminal
26	A4	O	Address bus 4 for CPU	76	ADSCIRQ	I	Interrupt input of ADSC
27	A5	O	Address bus 5 for CPU	77	ODCIRQ	I	Interrupt input of ODC
28	A6	O	Address bus 6 for CPU	78	DECIRQ	I	Interrupt input of ZIVA
29	A7	O	Address bus 7 for CPU	79	CSSIRQ	I	Not use (Pull down)
30	A8	O	Address bus 8 for CPU	80	ODCIRQ2	I	Interruption of system control
31	A9	O	Address bus 9 for CPU	81	ADSEP	I	Address data selection input
32	A10	O	Address bus 10 for CPU	82	RST	I	Reset input
33	A11	O	Address bus 11 for CPU	83	VDD	-	Power supply
34	VDD	-	Power supply	84	TEST1	I	Test signal 1 input
35	A12	O	Address bus 12 for CPU	85	TEST2	I	Test signal 2 input
36	A13	O	Address bus 13 for CPU	86	TEST3	I	Test signal 3 input
37	A14	O	Address bus 14 for CPU	87	TEST4	I	Test signal 4 input
38	A15	O	Address bus 15 for CPU	88	TEST5	I	Test signal 5 input
39	A16	O	Address bus 16 for CPU	89	TEST6	I	Test signal 6 input
40	A17	O	Address bus 17 for CPU	90	TEST7	I	Test signal 7 input
41	A18	O	Address bus 18 for CPU	91	TEST8	I	Test signal 8 input
42	A19	O	Address bus 19 for CPU	92	VSS	-	Ground
43	VSS	-	Ground	93	D0	I/O	Data bus 0 of CPU
44	A20	O	Address bus 20 for CPU	94	D1	I/O	Data bus 1 of CPU
45	TXSEL	O	TX Select	95	D2	I/O	Data bus 2 of CPU
46	TRVSW	I	Detection switch of traverse inside	96	D3	I/O	Data bus 3 of CPU
				97	D4	I/O	Data bus 4 of CPU
47	HUGUP	-	Connect to TP408	98	D5	I/O	Data bus 5 of CPU
48	HFMON	O	HFM Control output to Q103	99	D6	I/O	Data bus 6 of CPU
49	HAGUP	O	Connect to pick-up	100	D7	I/O	Data bus 7 of CPU
50	-	-	Connect to TP407				

■ MN103S28EGA (IC301) : Super optical disc controller

1.Terminal layout



2.Block diagram



3.Pin function (1/4)

Pin No.	Symbol	I/O	Description
1,2	NINT0,1	O	Interruption of system control 0,1
3	VDD3	-	Power supply terminal for I/O(3.3V)
4	VSS	-	Connect to ground
5	NINT2	O	Interruption of system control 2
6	WAITDOC	O	Wait control of system control
7	NMPST	O	Reset of system control (Non connect)
8	DASPST	I	Setting of initial value of DASP signal
9~17	CPUADR17~9	I	System control address
18	VDD18	-	Power supply terminal for I/O (1.8V)
19	VSS	-	Connect to ground
20	DRAMVDD18	-	Power supply terminal for DRAM (1.8V)
21	DRAMVSS	-	Connect to ground for DRAM
22~30	CPUADR8~0	I	System control address
31	VDD3	-	Power supply terminal for I/O (3.3V)
32	VSS	-	Connect to ground
33	DRAMVDD3	-	Power supply terminal for DRAM (3.3V)
34	NCS	I	System control chip select
35	NWR	I	Writing system control

3.Pin function (MN103S28EGA : 2/4)

Pin No.	Symbol	I/O	Description
36	NRD	I	Read signal input from system controller
37~44	CPUDT7~0	I/O	System control data
45	CLKOUT1	-	Non connect
46	MMOD	I	Test mode switch signal
47	NRST	I	System reset
48	MSTPOL	I	Master terminal polarity switch input
49	SCLOCK	-	Non connect
50	SDATA	-	Non connect
51	OFTR	I	Off track signal input
52	BDO	I	Drop out signal input
53~56	PWM1~4	-	Non connect
57	VDD3	-	Power supply terminal for I/O (3.3V)
58	DRAMVDD18	-	Power supply terminal for DRAM (1.8V)
59	DRAMVSS	-	Connect to ground for DRAM
60	VSS	-	Connect to ground
61~64	PWM5~8	-	Non connect
65	TBAL	O	Tracking balance adjustment output
66	FBAL	O	Focus balance adjustment output
67	TRSDRV	O	Traverse drive output
68	SPDRV	O	Spindle drive output
69	FG	I	Motor FG input
70	TILTP	-	Non connect
71	TILT	-	Non connect
72	TILTN	-	Non connect
73	TX	O	Digital output signal
74	DTRD	-	Non connect
75	IDGT	-	Non connect
76	VDD18	-	Power supply terminal for I/O (1.8V)
77	VSS	-	Connect to ground
78	VDD3	-	Power supply terminal for I/O (3.3V)
79	OSCI1	I	Oscillation input 16.9MHz
80	OSCO1	O	Oscillation output 16.9MHz
81	VSS	-	Connect to ground
82	TSTSG	O	Calibration signal
83	VFOSHORT	O	VFO short output
84	JLINE	O	J-line setting output
85	AVSSD	-	Connect to ground for analog circuit
86	ROUT	-	Non connect
87	LOUT	-	Non connect
88	AVDD	-	Power supply terminal for analog circuit (3.3V)
89	VCOF	I	JFVCO control voltage
90	TRCRS	I	Input signal for track cross formation
91	CMPIN	-	Non connect
92	LPFOUT	-	Non connect
93	LPFIN	I	Pull-up to VHALF
94	AVSS	-	Connect to ground for analog circuit
95	HPFOUT	-	Non connect
96	FPFIN	I	HPF input
97	CSLFLT	I	Pull-up to VHALF
98	RFDIF	-	Non connect
99	AVDDC	-	Power supply terminal for analog circuit (3.3V)
100	PLFLT2	I	Connect to capacitor 2 for PLL

3.Pin function (MN103S28EGA : 3/4)

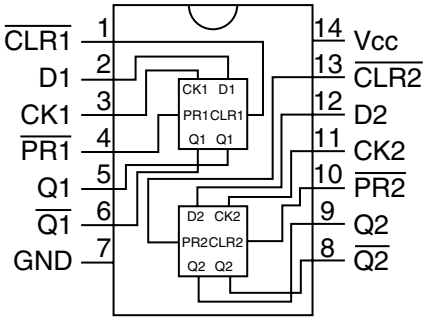
Pin No.	Symbol	I/O	Description
101	PLFLT1	I	Connect to capacitor 1 for PLL
102	AVSS	-	Connect to ground for analog circuit
103	RVI	I	Connect to resistor for VREF reference current source
104	VREFH	I	Reference voltage input (2.2V)
105	PLPG	-	Non connect
106	VHALF	I	Reference voltage input (1.65V)
107,108	DSLF2,1	I	Connect to capacitor 2,1 for DSL
109	AVDD	-	Power supply terminal for analog circuit (3.3V)
110	NARF	I	Equivalence RF-
111	ARF	I	Equivalence RF+
112	JITOUT	O	Output for jitter signal monitor
113	AVSS	-	Connect to ground for analog circuit
114	DAC0	O	Tracking drive output
115	DAC1	O	Focus drive output
116	AVDD	-	Power supply terminal for analog circuit (3.3V)
117	AD0	I	Focus error input
118	AD1	I	Phase difference/3 beams tracking error
119	AD2	I	AS : Full adder signal
120	AD3	I	RF envelope input
121	AD4	I	DVD laser current control terminal
122	AD5	I	
123	AD6	I	CD laser current control terminal
124	TECAPA	-	Non connect
125	VDD3	-	Power supply terminal for I/O (3.3V)
126	VSS	-	Connect to ground
127	MONI0	-	Connect to TP306
128	MONI1	-	Connect to TP307
129	MONI2	-	Connect to TP308
130	MONI3	-	Connect to TP309
131	NEJECT	I/O	Eject detection
132	NTRYCTL	I/O	Tray close detection
133	NDASP	I/O	ATAPI drive active / slave connect I/O
134	NCS3FX	I	ATAPI host chip select
135	NCS1FX	I	ATAPI host chip select
136,137	DA2	I/O	ATAPI host address 2,0
138	NPDIAG	I/O	ATAPI slave master diagnosis input
139	DA1	I/O	ATAPI host address 1
140	NIOCS16	-	Non connect
141	INTRQ	O	ATAPI host interruption output
142	NDMACK	I	ATAPI host DMA characteristic
143	VDD3	-	Power supply terminal I/O (3.3V)
144	VSS	-	Connect to ground
145	IORDY	-	NOn connect
146	NIORD	I/O	ATAPI host read
147	NIOWR	-	Non connect
148	DMARQ	-	Non connect
149	HDD15	I/O	ATAPI host data 15
150	HDD0	I/O	ATAPI host data 0
151	HDD14	I/O	ATAPI host data 14
152	VDD18	-	Power supply terminal for I/O (1.8V)
153	PO	I	Connect to ground
154	UATASEL	I	Connect to ground

3.Pin function (MN103S28EGA : 4/4)

Pin No.	Symbol	I/O	Description
155	VSS	-	Connect to ground
156	VDD3	-	Power supply terminal for I/O (3.3V)
157	HDD1	I/O	ATAPI host data 1
158	HDD13	I/O	ATAPI host data 13
159	HDD2	I/O	ATAPI host data 2
160	HDD12	I/O	ATAPI host data 12
161	HDD3	I/O	ATAPI host data 3
162	VDD3	-	Power supply terminal for I/O (3.3V)
163	VSS	-	Connect to ground
164	HDD11	I/O	ATAPI host data 11
165	HDD4	I/O	ATAPI host data 4
166	HDD10	I/O	ATAPI host data 10
167	HDD5	I/O	ATAPI host data 5
168	HDD9	I/O	ATAPI host data 9
169	VDD3	-	Power supply terminal for I/O (3.3V)
170	VSS	-	Connect to ground
171~173	HDD6~8	I/O	ATAPI host data 6~8
174	VDDH	-	Reference power supply for ATAPI (5.0V)
175	NRESET	I	ATAPI host reset input
176	MASTER	I	ATAPI master / slave select

■ 74VHC74MTC-X (IC454) : ZIVA Wait

1.Terminal layout



2.Trouth table

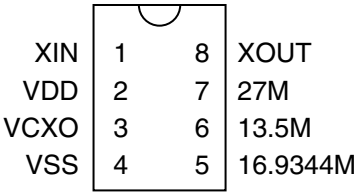
Input				Output		Function
$\overline{CLR}$	$\overline{PR}$	D	CK	Q	$\overline{Q}$	
L	H	X	X	L	H	Clear
H	L	X	X	H	L	Preset
L	L	X	X	H(Note 1)	H(Note 1)	
H	H	L	↑	L	H	
H	H	H	↑	H	L	
H	H	X	↓	Qn	Qn	No change

3.Pin function

Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	CLR1	I	Direct clear input 1	8	Q2	O	Output
2	D1	I	Data input 1	9	Q2	O	Output
3	CK1	I	Clock pulse input 1	10	PR2	I	Direct preset input 2
4	PR1	I	Direct preset input 1	11	CK2	I	Click pulse input 2
5	Q1	O	Output	12	D2	I	Data input 2
6	Q1	O	Output	13	CLR2	I	Clock clear input 2
7	GND	-	Connect to ground	14	VCC	-	Power supply

■ CY24203SC-X (IC571) : MPEG/Audio clock generator with VCXO

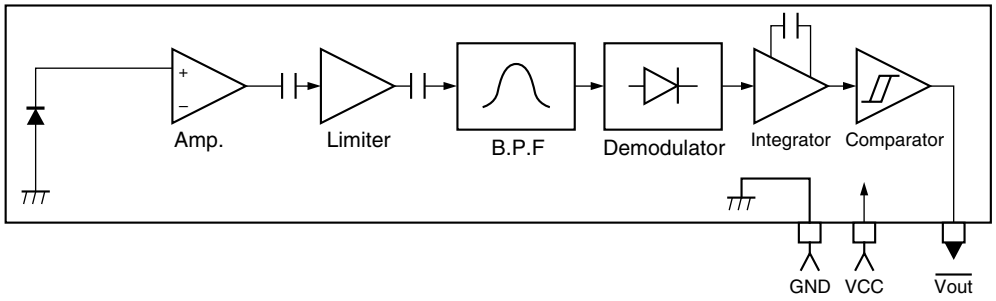
1.Pin layout



2.Pin function

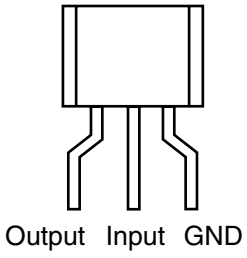
Pin No.	Symbol	Description
1	XIN	Reference crystal input
2	VDD	Power supply
3	VCXO	Input analog control for VCXO
4	VSS	Connect to ground
5	16.9344M	16.9344 MHz clock output
6	13.5	13.5 MHz clock output
7	27M	27 MHz clock output
8	XOUT	Reference crystal output

■ GP1U271X (IC801) : Receiver for remote

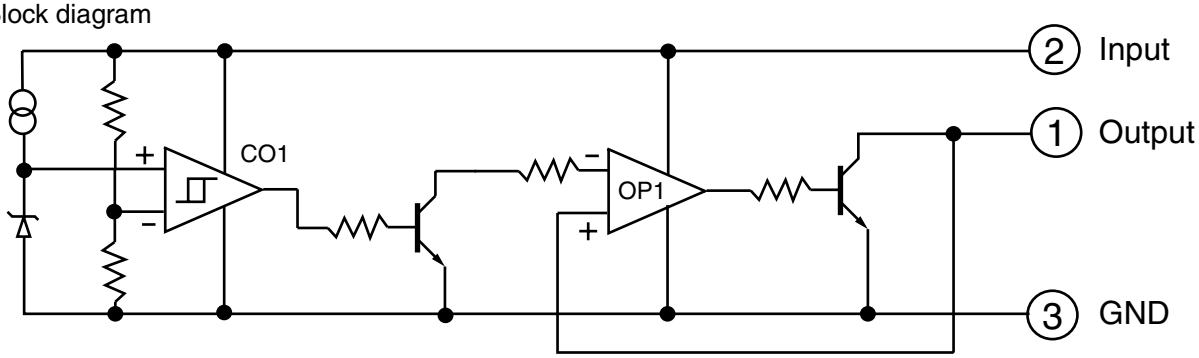


■ IC-PST9140-T (IC702) : System Reset IC

1.Terminal layout

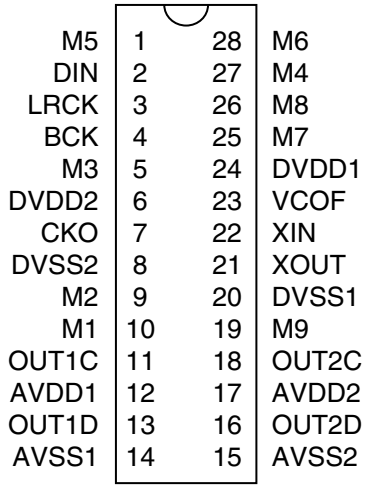


2.Block diagram



■ MN35505-X (IC703) : DAC

1.Terminal layout

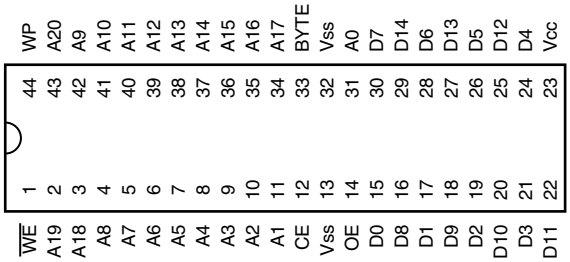


2. Pin function

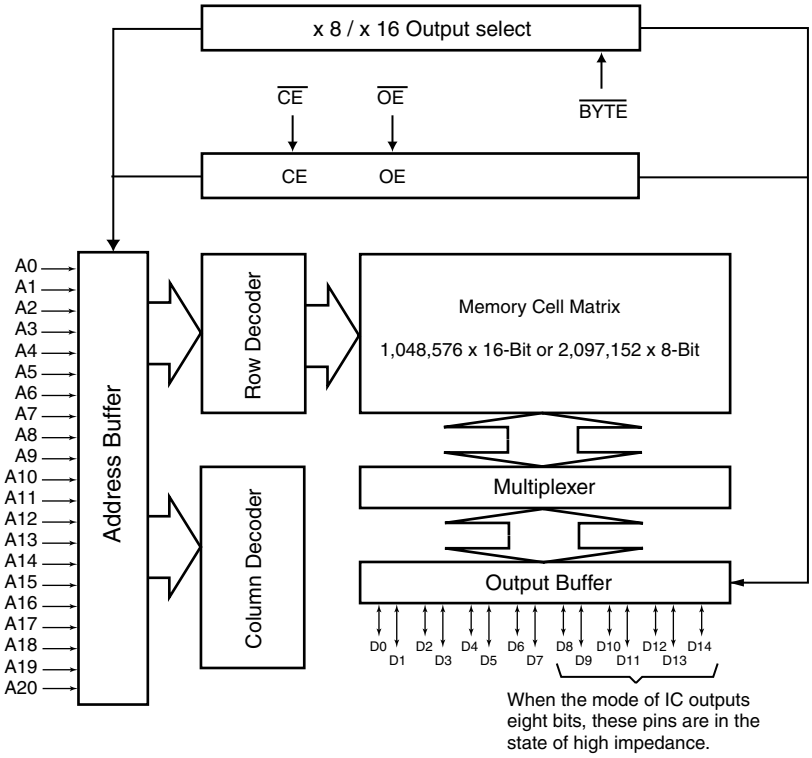
Pin No.	Symbol	I/O	Description
1	M5	I	Control signal for DAC
2	DIN	I	Digital data input
3	LRCK	I	L and R clock for DAC
4	BCK	I	Bit clock for DAC
5	M3	I	Control signal for DAC
6	DVDD2	-	Power supply terminal
7	CKO	-	Non connect
8	DVSS2	-	Connect to ground
9	M2	I	Control signal for DAC
10	M1	I	Control signal for DAC
11	OUT1C	O	Analog output 1
12	AVDD1	-	Power supply terminal
13	OUT1D	O	Analog output 1
14	AVSS1	-	Connect to ground
15	AVSS2	-	Connect to ground
16	OUT2D	O	Analog output 2
17	AVDD2	-	Power supply terminal
18	OUT2C	O	Analog output 2
19	M9	I	Control signal for DAC
20	DVSS1	-	Connect to ground
21	XOUT	-	Non connect
22	XIN	-	Non connect
23	VCOF	I	VCO Frequency
24	DVDD1	-	Power supply D+5V
25	M7	-	Connect to ground
26	M8	-	Connect to ground
27	M4	I	Control signal for DAC
28	M6	I	Clock for control signal

■ MR27V1602E1UTPX (IC402) :P2 ROM of 1,048,576word x 16 bit / 2,097,152 word x 8 bit

1.Pin layout



2.Block diagram

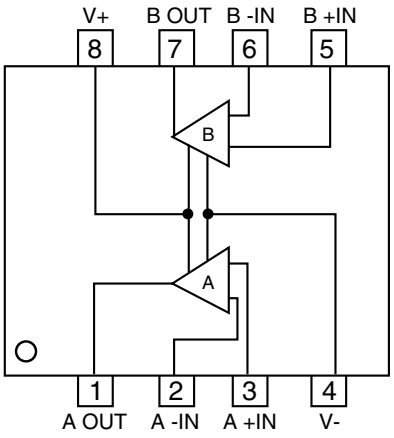


3.Pin functions

Symbol	Function
A0 - A20	Address Input
D0 - D14	Data Output
CE	Chip Enable
OE	Output Enable
BYTE	Mode Switch
Vcc	Power Supply
Vss	GND
WE	Write enable
WP	Connect to ground

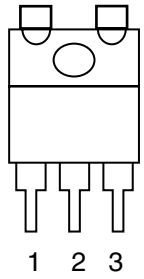
■ NJM4580M-X (IC741,IC751) : Dual OP amplifier

Block diagram

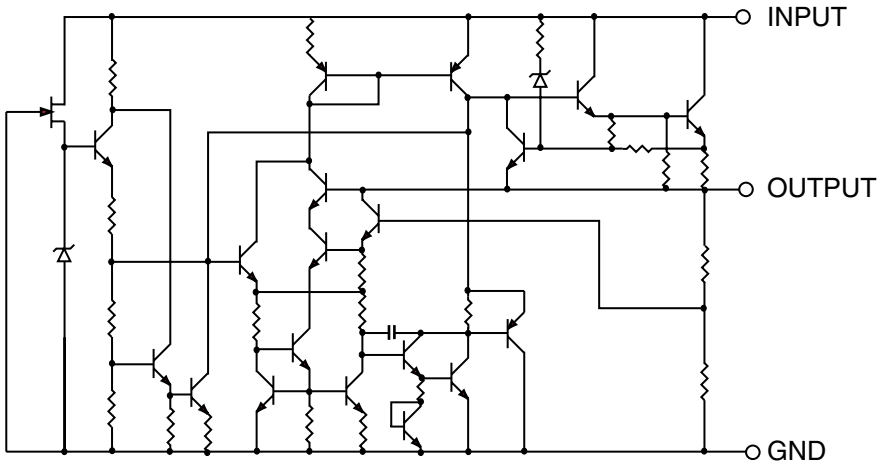


■ NJM78M05FA (IC953) : Regulator

1.Terminal layout

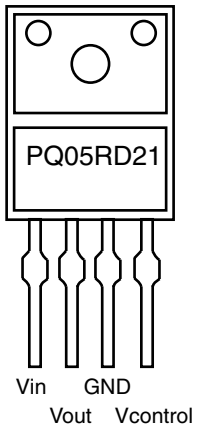


2.Block diagram

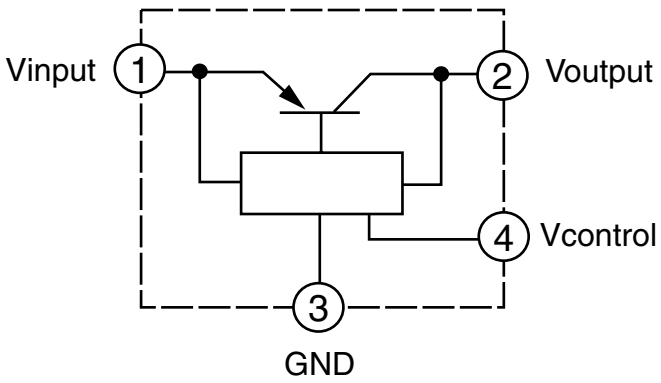


■ PQ05RD21 (IC951) : Regulator

1.Terminal layout

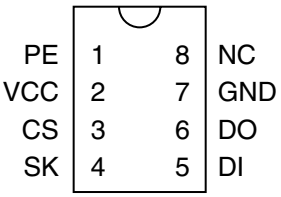


2.Block diagram



■ S-93C66AFJ-X (IC451) : EEPROM

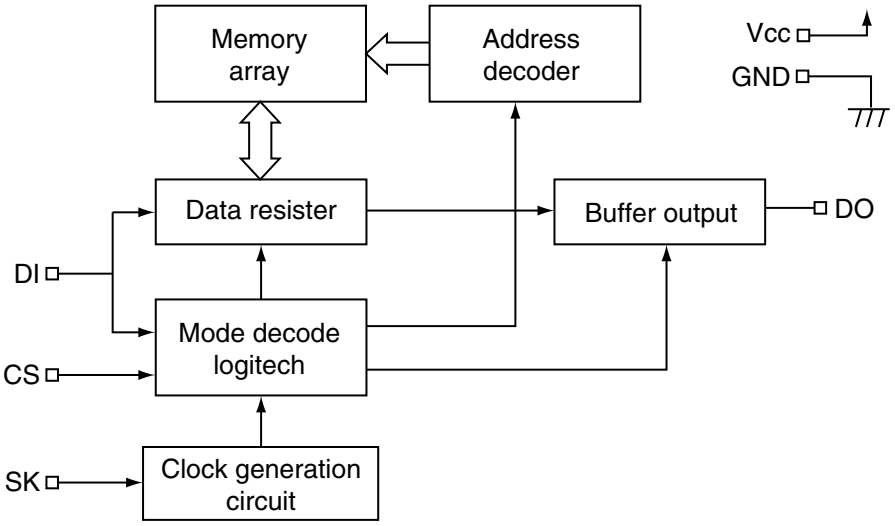
1.Pin layout



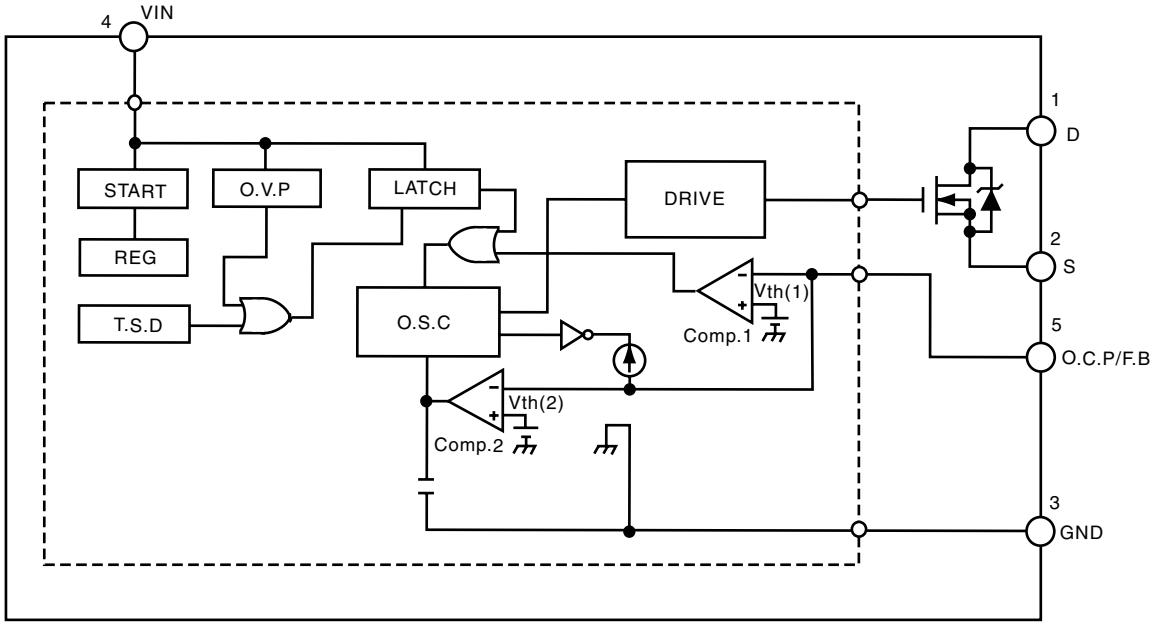
2.Pin function

Pin No.	Symbol	I/O	Description
1	PE	-	Non connect
2	VCC	-	Power supply terminal
3	CS	I	Chip select input
4	SK	I	Serial clock input
5	DI	I	Serial data input
6	DO	O	Serial data output
7	GND	-	Connect to ground
8	NC	-	Non connect

1.Block diagram

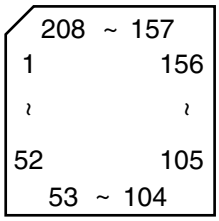


■ STR-G6651 (IC901) : Switch regulator



■ ZIVA-4.1-PA2(IC501):Back end - Digital decoder

1.Terminal layout



2.Pin function (1/5)

Pin No.	Symbol	I/O	Description
1	RD	I	Read strobe input
2	R/W	I	Read/write strobe input
3	VDD	-	Power supply terminal 3.3V
4	WAIT	O	Transfer not complete / data acknowledge. Active LOW to indicate host initiated transfer is complete.
5	RESET	I	Active LOW : reset signal input
6	VSS	-	Connect to ground
7	VDD	-	Power supply terminal 3.3V
8	INT	O	Host interrupt signal output
9	NC	-	Non connect
10	NC	-	Non connect
11	NC	-	Non connect
12	NC	-	Non connect
13	VDD	-	Power supply terminal 2.5V
14	VSS	-	Connect to ground
15	NC	-	Non connect
16	NC	-	Non connect
17	NC	-	Non connect
18	NC	-	Non connect
19	VSS	-	Connect to ground
20	VDD	-	Power supply 3.3V
21	VDATA0	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
22	VDATA1	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
23	VDATA2	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
24	VDATA3	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
25	VDATA4	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
26	VDATA5	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
27	VDATA6	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
28	VDATA7	O	Video data bus output. Byte serial CbYCrY data synchronous with VCLK.
29	VSYNC	I/O	Vertical sync. Bi-directional, the decoder output the top border of a new field on the first HSYNC after the falling edge of VSYNC.
30	HSYNC	I/O	Horizontal sync. The decoder begins outputting pixel data for a new horizontal line after the falling (active) edge of HSYNC.
31	VSS	-	Connect to ground
32	VDD	-	Power supply terminal 3.3V
33	NC	-	Non connect
34	NC	-	Non connect
35	NC	-	Non connect
36	VDD	-	Power supply terminal 2.5V

2.Pin function (ZIVA-4.1-PA2 : 2/5)

Pin No.	Symbol	I/O	Description
37	VSS	-	Connect to ground
38	NC	-	Non connect
39	NC	-	Non connect
40	NC	-	Non connect
41	NC	-	Non connect
42	NC	-	Non connect
43	PIO0	I/O	Programmable I/O terminal
44	VSS	-	Connect to ground
45	VDD	-	Power supply terminal 3.3V
46	PIO1	I/O	Programmable I/O terminal
47	PIO2	I/O	Programmable I/O terminal
48	PIO3	I/O	Programmable I/O terminal
49	PIO4	I/O	Programmable I/O terminal
50	PIO5	I/O	Programmable I/O terminal
51	PIO6	I/O	Programmable I/O terminal
52	PIO7	I/O	Programmable I/O terminal
53	MDATA0	I/O	SDRAM data
54	MDATA1	I/O	SDRAM data
55	VDD	-	Power supply terminal 3.3V
56	VSS	-	Connect to ground
57	MDATA2	I/O	SDRAM data
58	MDATA3	I/O	SDRAM data
59	MDATA4	I/O	SDRAM data
60	MDATA5	I/O	SDRAM data
61	MDATA6	I/O	SDRAM data
62	MDATA7	I/O	SDRAM data
63	MDATA15	I/O	SDRAM data
64	VDD	-	Power supply terminal 3.3V
65	VSS	-	Connect to ground
66	MDATA14	I/O	SDRAM data
67	VDD	-	Power supply terminal 2.5
68	VSS	-	Connect to ground
69	MDATA13	I/O	SDRAM data
70	MDATA12	I/O	SDRAM data
71	MDATA11	I/O	SDRAM data
72	MDATA10	I/O	SDRAM data
73	MDATA9	I/O	SDRAM data
74	VDD	-	Power supply terminal 3.3V
75	VSS	-	Connect to ground
76	MDATA8	I/O	SDRAM data
77	LDQM	O	SDRAM Lower or upper mask
78	SD-CLK	O	SDRAM Clock
79	CLKSEL	I	Selects SYSCLK or VCLK as clock source. Normal operation is to tie HIGH.
80	MADDR9	O	SDRAM address
81	MADDR8	O	SDRAM address
82	VDD	-	Power supply terminal 3.3V
83	VSS	-	Connect to ground
84	MADDR7	O	SDRAM address

2.Pin function (ZIVA-4.1-PA2 : 3/5)

Pin No.	Symbol	I/O	Description
85	MADDR6	O	SDRAM address
86	MADDR5	O	SDRAM address
87	VDD	-	Power supply terminal 2.5V
88	VSS	-	Connect to ground
89	MADDR4	O	SDRAM address
90	MWE	O	SDRAM write enable
91	SD-CAS	O	Active LOW SDRAM column address
92	VDD	-	Power supply terminal 3.3V
93	VSS	-	Connect to ground
94	SD-RAS	O	Active LOW SDRAM row address
95	SD-CS0	O	Active LOW SDRAM chip select 0
96	SD-CS1/MADDR11	O	Active LOW SDRAM chip select 1 or use as MADDR11 for larger SDRAM
97	SD-BS	O	SDRAM bank select
98	MADDR10	O	SDRAM address
99	MADDR0	O	SDRAM address
100	VDD	-	Power supply terminal 3.3V
101	VSS	-	Connect to ground
102	MADDR1	O	SDRAM address
103	MADDR2	O	SDRAM address
104	MADDR3	O	SDRAM address
105	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table1
106	NC	-	Non connect
107	NC	-	Non connect
108	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table1
109	NC	-	Non connect
110	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table1
111	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table1
112	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table1
113	DAI-LRCK	I	PCM left/right clock
114	DAI-BCK	I	PCM input bit clock
115	VDD	-	Power supply 3.3V
116	VSS	-	Connect to ground
117	DAI-DATA	I	PCM data input
118	DA-DATA3	O	PCM data output. Eight channels. Serial audio samples relative to DA_BCK and DA_LRCK
119	DA-DATA2	O	PCM data output. Eight channels. Serial audio samples relative to DA_BCK and DA_LRCK
120	DA-DATA1	O	PCM data output. Eight channels. Serial audio samples relative to DA_BCK and DA_LRCK
121	DA-DATA0	O	PCM data output. Eight channels. Serial audio samples relative to DA_BCK and DA_LRCK
122	DA-LRCK	O	PCM left clock. Identifies the channel for each sample
123	VDD	-	Power supply terminal 3.3V
124	VSS	-	Connect to ground
125	DA-XCK	I/O	Audio external frequency clock input or output
126	DA-BCK	O	PCM bit clock output
127	DA-IEC	O	PCM data out in IEC-958 format or compressed data out in IEC-1937 format
128	VDD	-	Power supply terminal 2.5V

2.Pin function (ZIVA-4.1-PA2 : 4/5)

Pin No.	Symbol	I/O	Description
129	VSS	-	Connect to ground
130	NC	-	Non connect
131	VSS_DAC	-	Connect to ground for analog video DAC
132	VSS_VIDEO	-	Connect to ground for analog video
133	CVBS	O	DAC video output format : CVBS. Macrovision encoded
134	VDD_DAC	-	Power supply terminal for analog video DAC
135	VDD_VIDEO	-	Power supply terminal for analog video
136	NC	-	Non connect
137	VSS_DAC	-	Connect to ground for analog video DAC
138	VSS_VIDEO	-	Connect to ground for analog video
139	CVBS/G/Y	O	DAC video output format. Macrovision encoded
140	VDD_DAC	-	Power supply terminal for analog video DAC
141	VDD_VIDEO	-	Power supply terminal for analog video
142	NC	-	Non connect
143	VSS_DAC	-	Connect to ground for analog video DAC
144	VSS_VIDEO	-	Connect to ground for analog video
145	Y/B/U	O	DAC video output format. Macrovision encoded
146	VDD_DAC	-	Power supply terminal for analog video DAC
147	VDD_VIDEO	-	Power supply terminal for analog video
148	NC	-	Non connect
149	VSS_DAC	-	Connect to ground for analog video DAC
150	VSS_VIDEO	-	Connect to ground for analog video
151	C/R/V	O	DAC video output format. Macrovision encoded
152	VDD_DAC	-	Power supply terminal for analog video DAC
153	VDD_VIDEO	-	Power supply terminal for analog video
154	VSS_RREF	-	Connect to ground for analog video
155	RREF	O	Reference resistor. Connecting to pin 154
156	VDD_RREF	-	Power supply terminal for analog video 3.3V
157	A_VSS	-	Power supply terminal for analog PLL 3.3V
158	SYSCLK	I	Optical system clock. Tie to A_VDD through a 1K ohm resistor
159	VCLK	I	System clock input
160	A_VDD	-	Power supply terminal for analog PLL 3.3V
161	DVD-DATA0/CD-DATA	I	Serial CD data. This pin is shared with DVD compressed data DVD-DATA0
162	DVD-DATA1/CD-LRC	I	Programmable polarity 16-bit word synchronization to the decoder. This pin is shared with DVD compressed data DVD-DATA1
163	DVD-DATA2/CD-BCK	I	CD bit clock. Decoder accept multiple BCK rates. This pin is shared with DVD compressed DVD-DATA2
164	DVD-DATA3/CD-C2PO	I	Asserted HIGH indicates a corrupted byte. This pin is shared with DVD compressed data DVD-DATA3
165	DVD-DATA4/CDGSDATA	I	DVD parallel compressed data from DVD DSP. or CD-G data indicating serial subcode data input
166	VSS	-	Connect to ground
167	VDD	-	Power supply terminal 3.3V
168	DVD-DATA5/CDG-VFSY	I	DVD parallel compressed data from DVD DSP. or CD-G frame sync indicating frame-start or composite synchronization input.
169	DVD-DATA6/CDG-SOS1	I	DVD parallel compressed data from DVD DSP. or CD-G block sync indicating block-start synchronization input

2.Pin function (ZIVA-4.1-PA2 : 5/5)

Pin No.	Symbol	I/O	Description
170	DVD-DATA7/CDG-SCLK	I	DVD parallel compressed data from DVD DSP. or CD-G clock indicating sub code data clock input or output
171	VDACK	I	In synchronous mode, bitstream data acknowledge. Asserted when DVD data is valid.Polarity is programmable
172	VREQUEST	O	Bitstream request
173	VSTROBE	I	Bitstream strobe
174	ERROR	I	Error in input data
175	VDD	-	Power supply terminal 3.3V
176	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
177	VDD	-	Power supply terminal 3.3V
178	VSS	-	Connect to ground
179	NC	-	Non connect
180	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
181	NC	-	Non connect
182	HADDR0	I	Host addressbus. 3-bit address bus selects one of eight host interface registers
183	HADDR1	I	Host addressbus. 3-bit address bus selects one of eight host interface registers
184	HADDR2	I	Host addressbus. 3-bit address bus selects one of eight host interface registers
185	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
186	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
187	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
188	VSS	-	Connect to ground
189	VDD	-	Power supply terminal 2.5V
190	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
191	VSS	-	Connect to ground
192	VDD	-	Power supply terminal 3.3V
193	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
194	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
195	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
196	RESERVED	I	Tie to VSS or VDD_3.3 as specified in table 1
197	HDATA7	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
198	VSS	-	Connect to ground
199	HDATA6	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
200	HDATA5	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
201	HDATA4	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
202	HDATA3	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
203	HDATA2	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
204	VDD	-	Power supply terminal 3.3V
205	VSS	-	Connect to ground
206	HDATA1	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
207	HDATA0	I/O	The 8-bit bi-derectional host data through which the host writes data to the decoder code.
208	CS	I	Host chip select input

Safety precaution

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▬) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.
When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the JC version)

For this service manual

This service manual is a service manual of the model which changes a part of specification of the above-mentioned model which has already been put on the market.

< When the label in figure is pasted in the main body >
The specification is different from what the label of the same model does not paste because of the specification improvement, and refer to this service manual, please.
Please already refer to the issued service manual when the label is not pasted.

▪ サービスをされる方へ
サービスマニュアルは該当モデルの〔MK2〕を参照してください.

▪ Used only service dealer

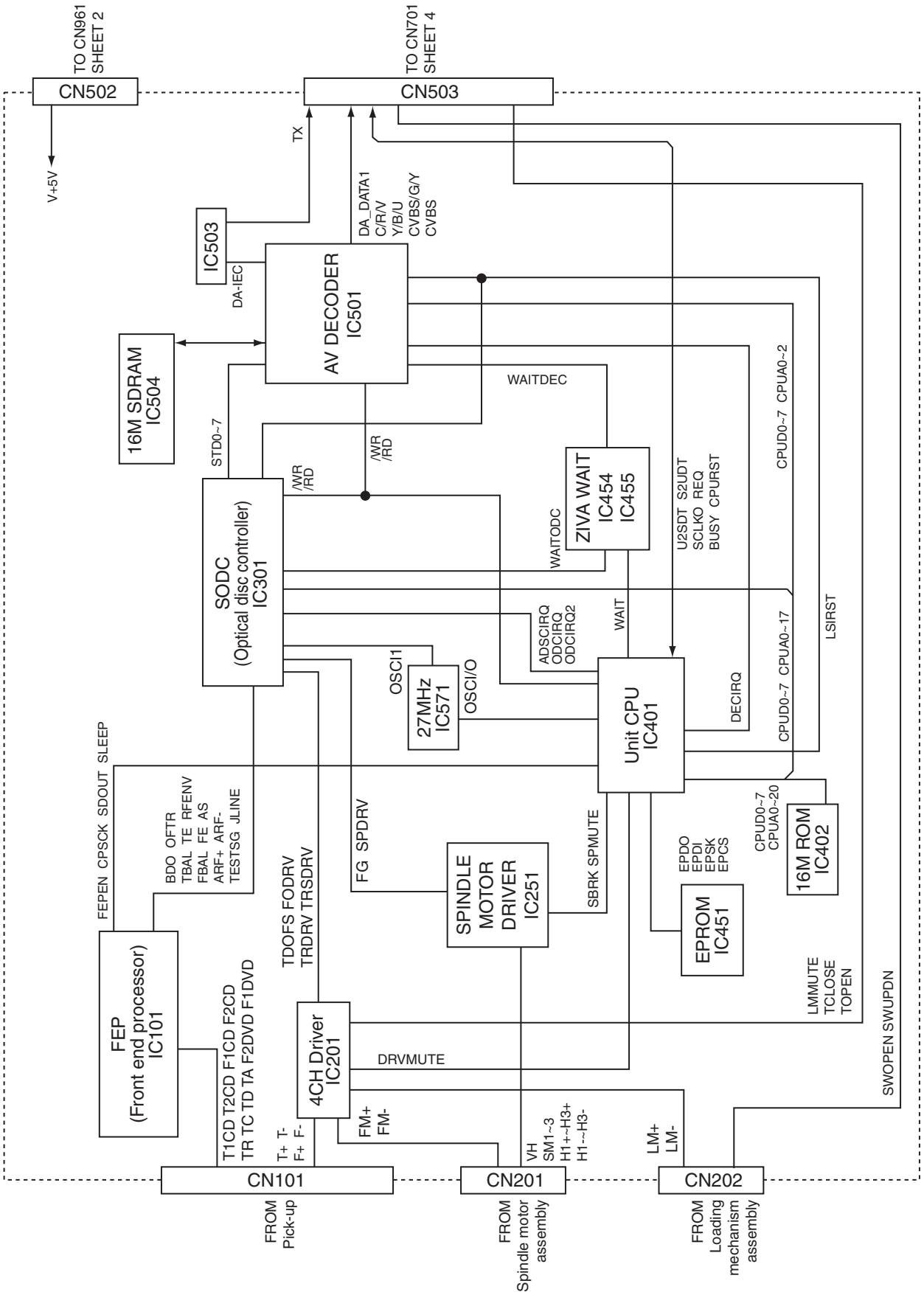
Please refer to service manual of an applicable model [MK2].

GN30044-001A

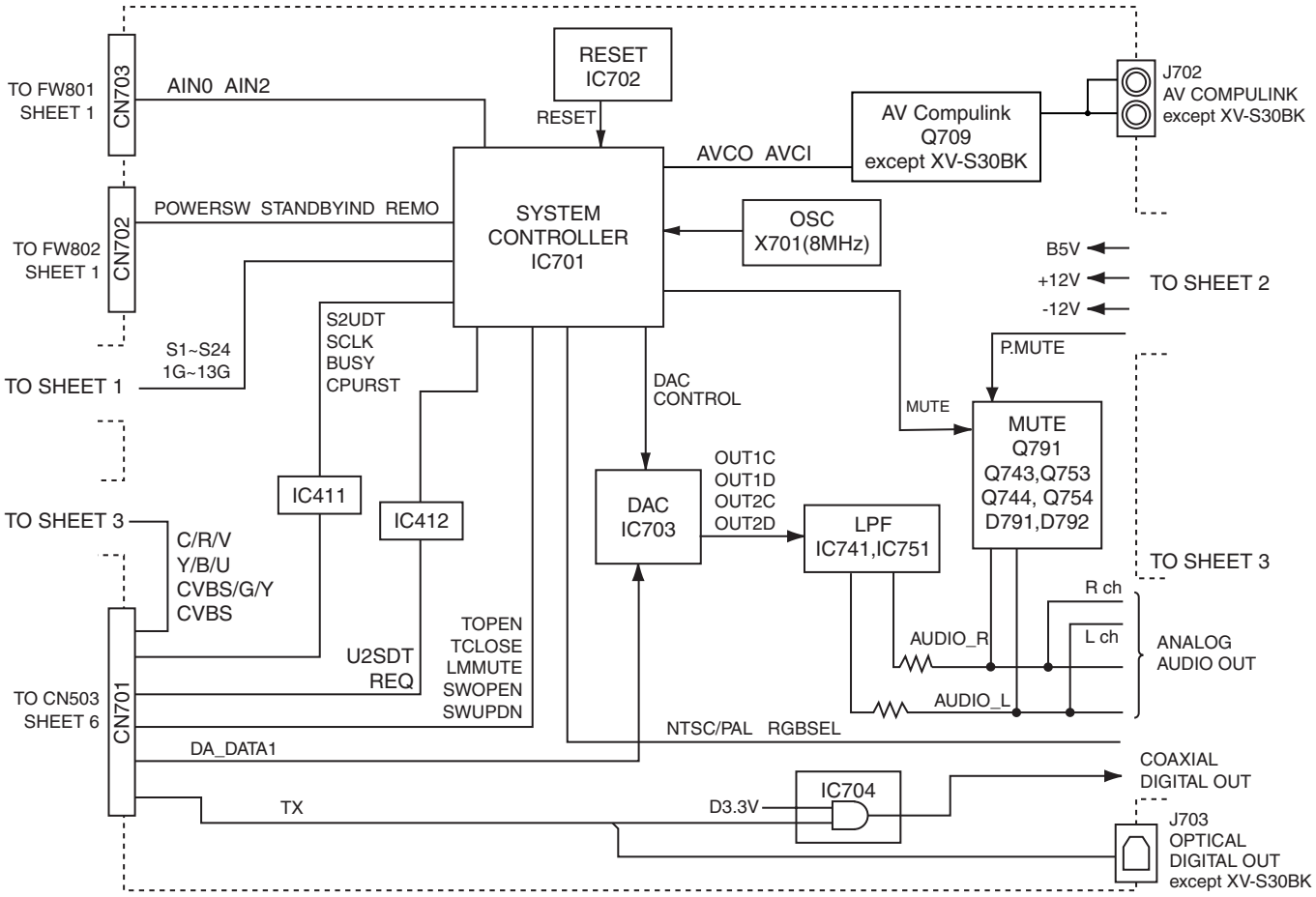
* Please refer to this service manual for the model to which this label is pasted.
* Please refer to the service manual which has already been issued for the model to which this label is not pasted.
(one that there is no description named [MK2] in cover of service manual)

Block diagrams

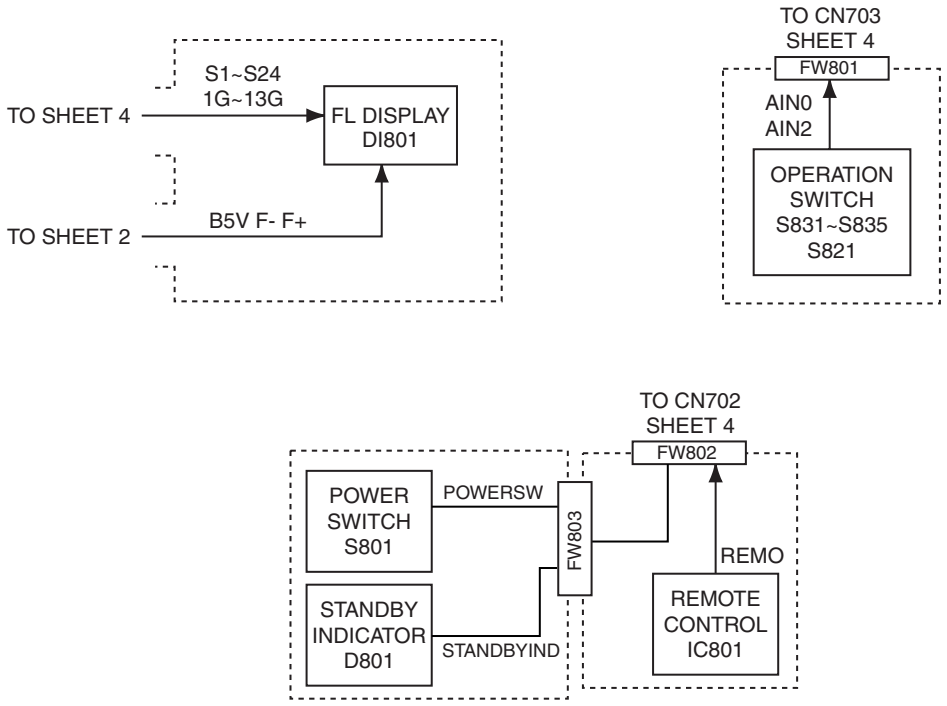
■ DVD Servo control & AV decoder section (SHEET 5,6)



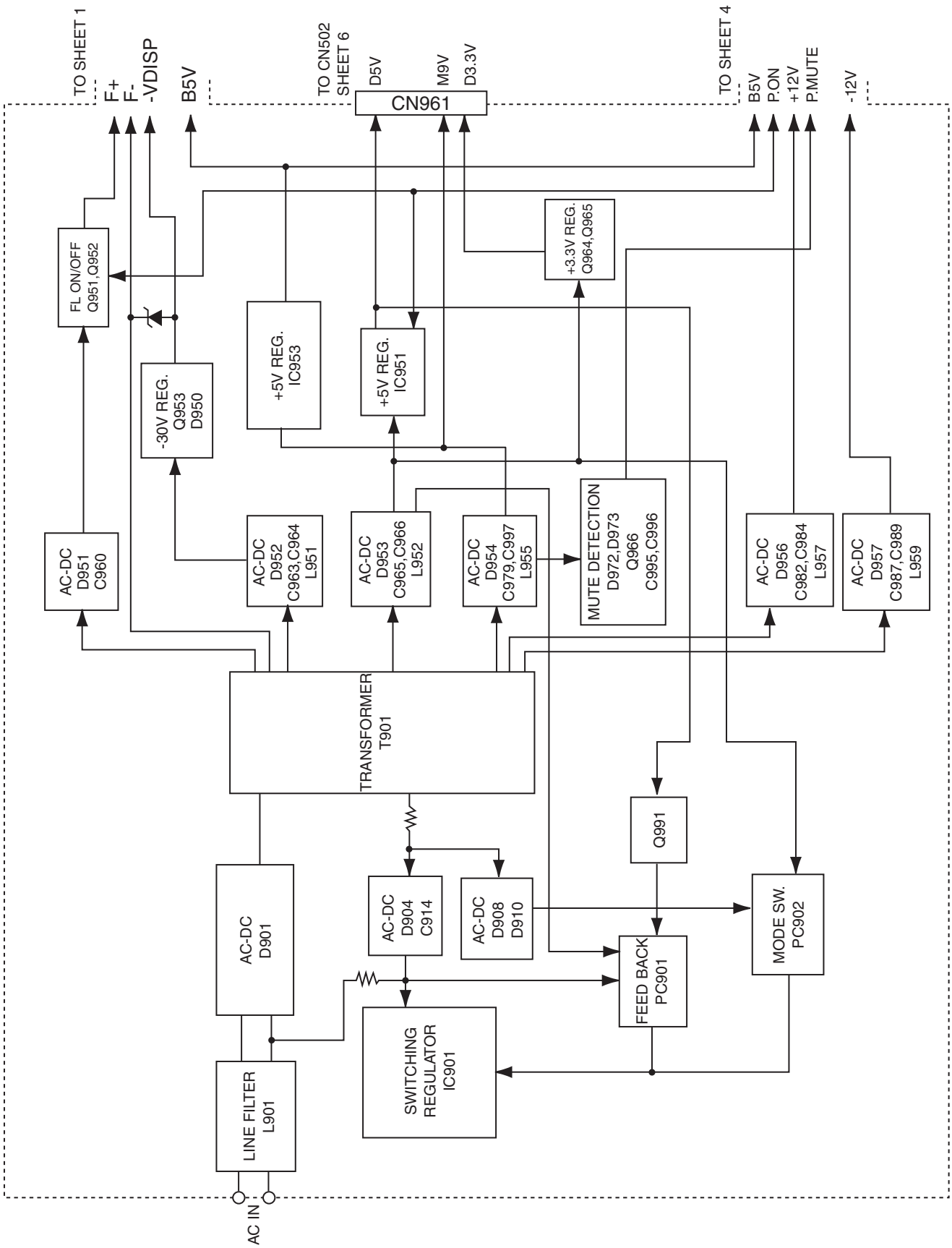
■ System control & audio output section (SHEET 4)



■ FL Display & Operation switch section (SHEET 1)

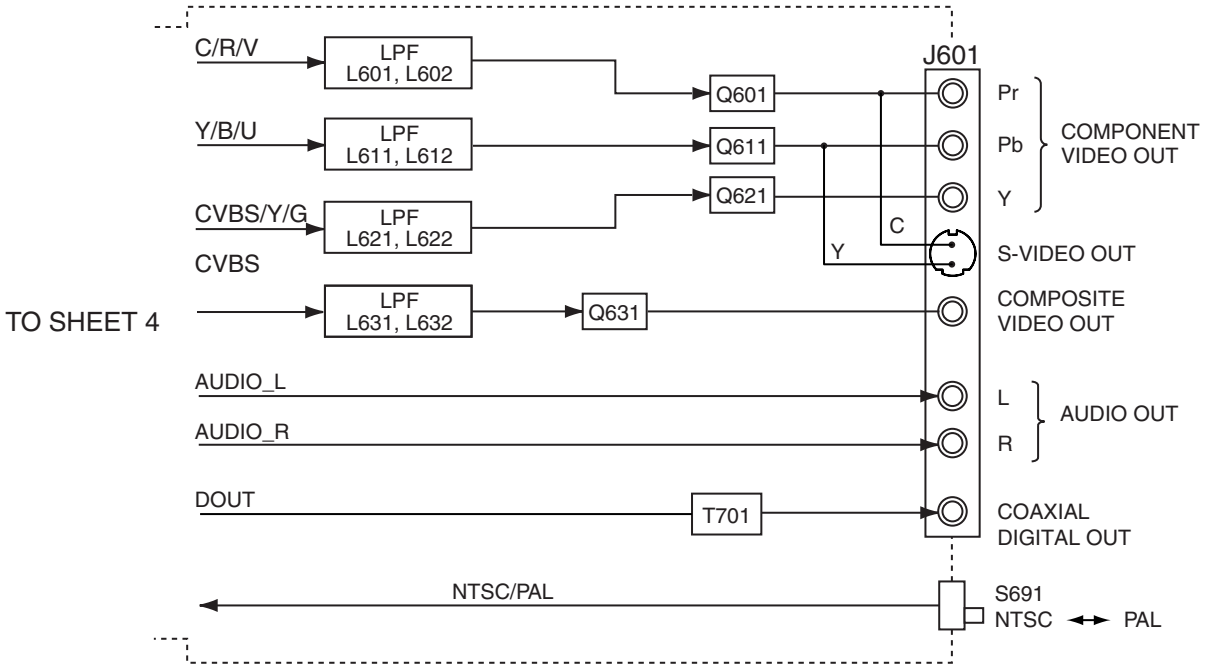


■ DC Regulator section (SHEET 2)

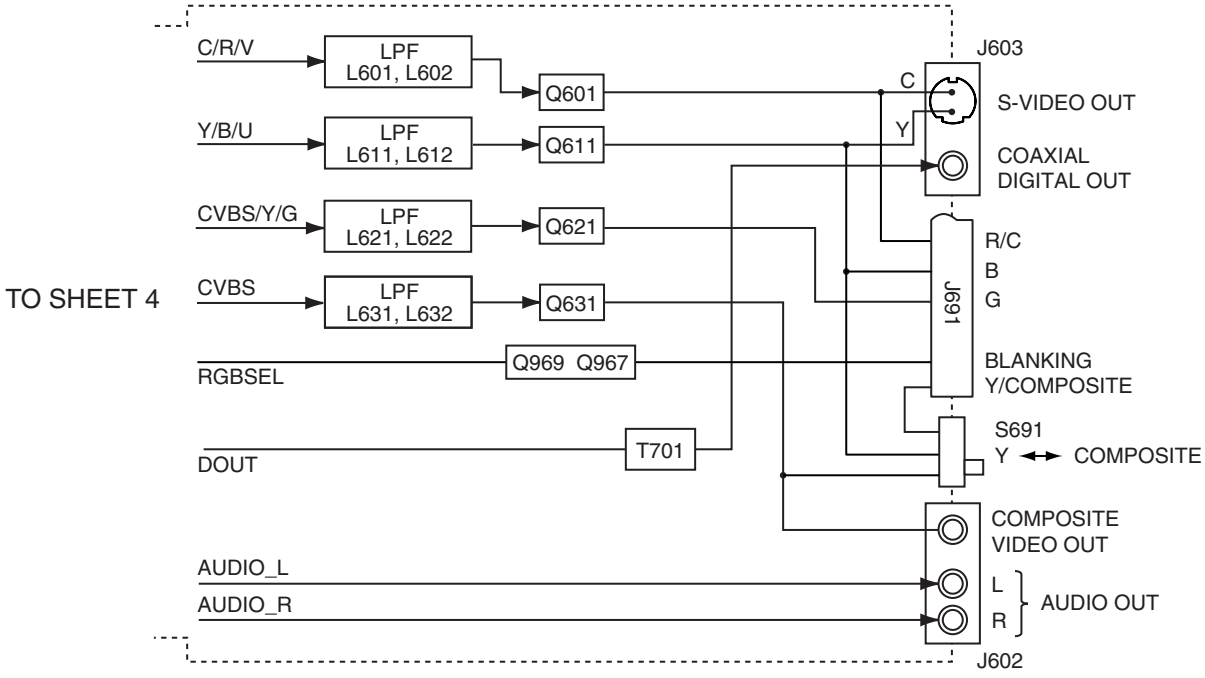


■ Audio & Video signal output section (SHEET 3)

< For except Europe >



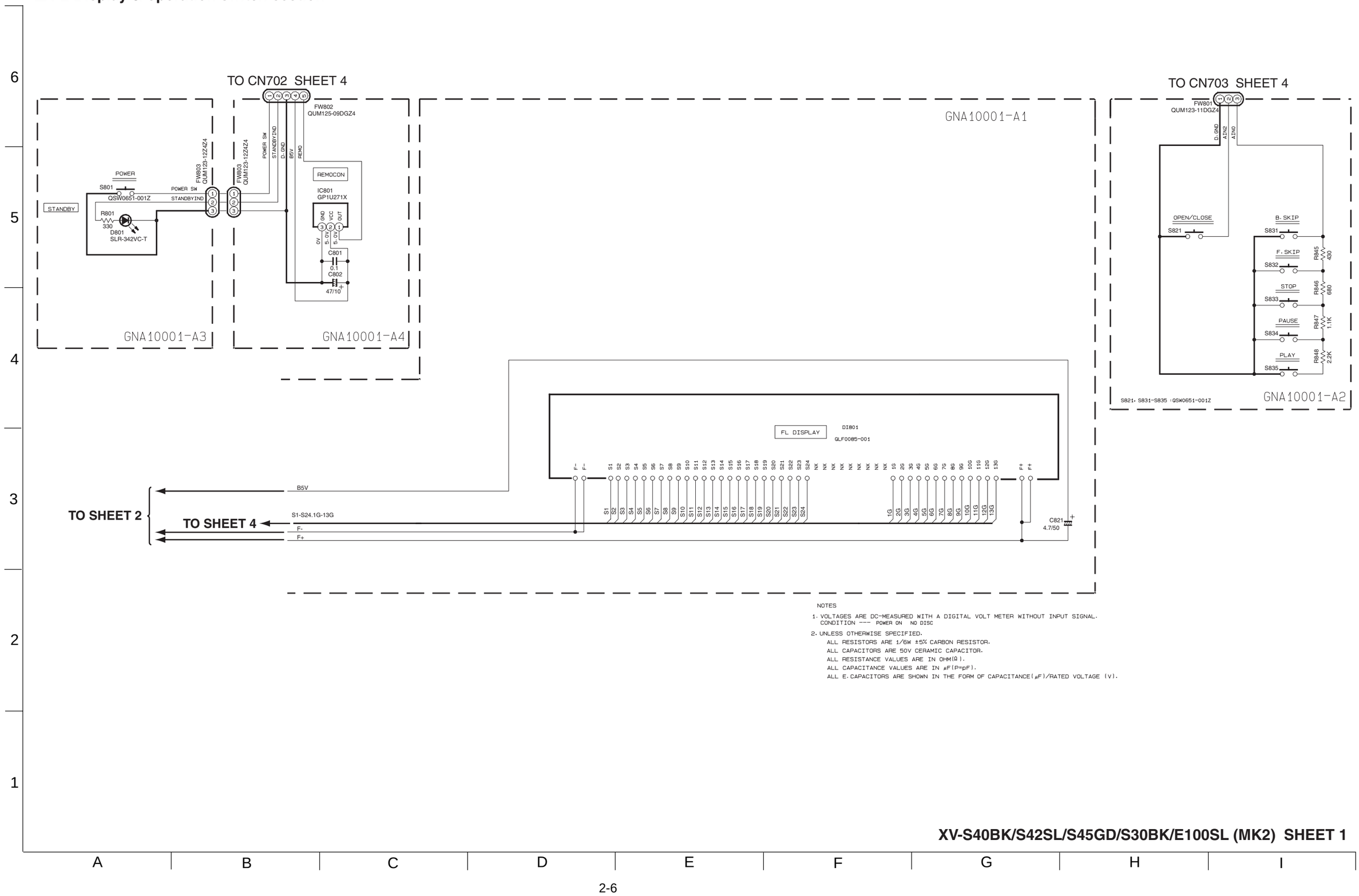
< For only Europe >



XV-S40BK/XV-S42SL/XV-S45GD
XV-S30BK/XV-E100SL

Standard schematic diagrams

■ FL Display & operation switch section

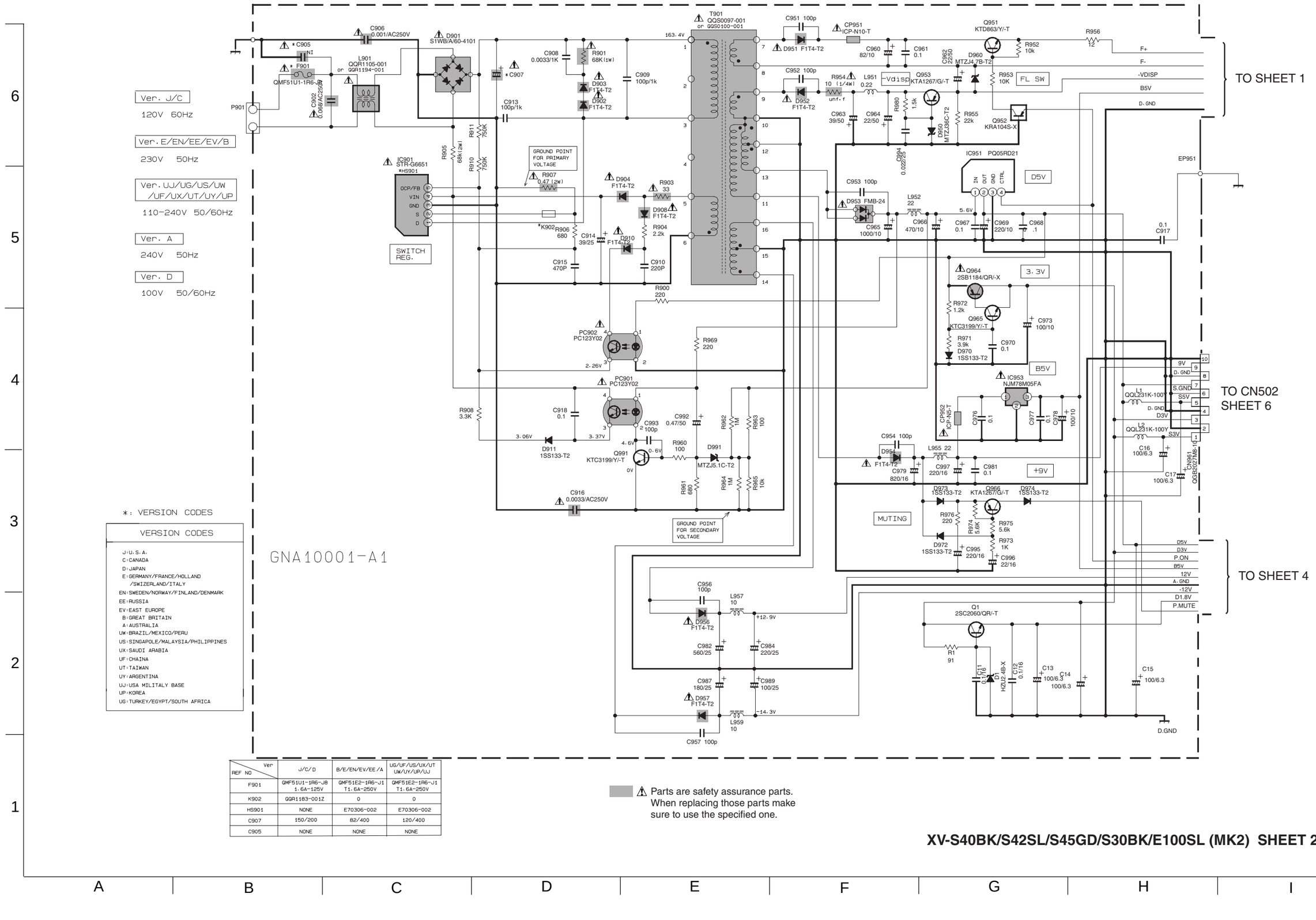


NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION ---- POWER ON NO DISC
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

XV-S40BK/S42SL/S45GD/S30BK/E100SL (MK2) SHEET 1

■ Power supply section



*: VERSION CODES

VERSION CODES
J : U.S.A.
C : CANADA
D : JAPAN
E : GERMANY/FRANCE/HOLLAND /SWIZERLAND/ITALY
EN : SWEDEN/NORWAY/FINLAND/DENMARK
EE : RUSSIA
EV : EAST EUROPE
B : GREAT BRITAIN
A : AUSTRALIA
UW : BRAZIL/MEXICO/PERU
US : SINGAPOLE/MALAYSIA/PHILIPPINES
UX : SAUDI ARABIA
UF : CHAINA
UT : TAIWAN
UY : ARGENTINA
UJ : USA MILITALY BASE
UP : KOREA
UG : TURKEY/EGYPT/SOUTH AFRICA

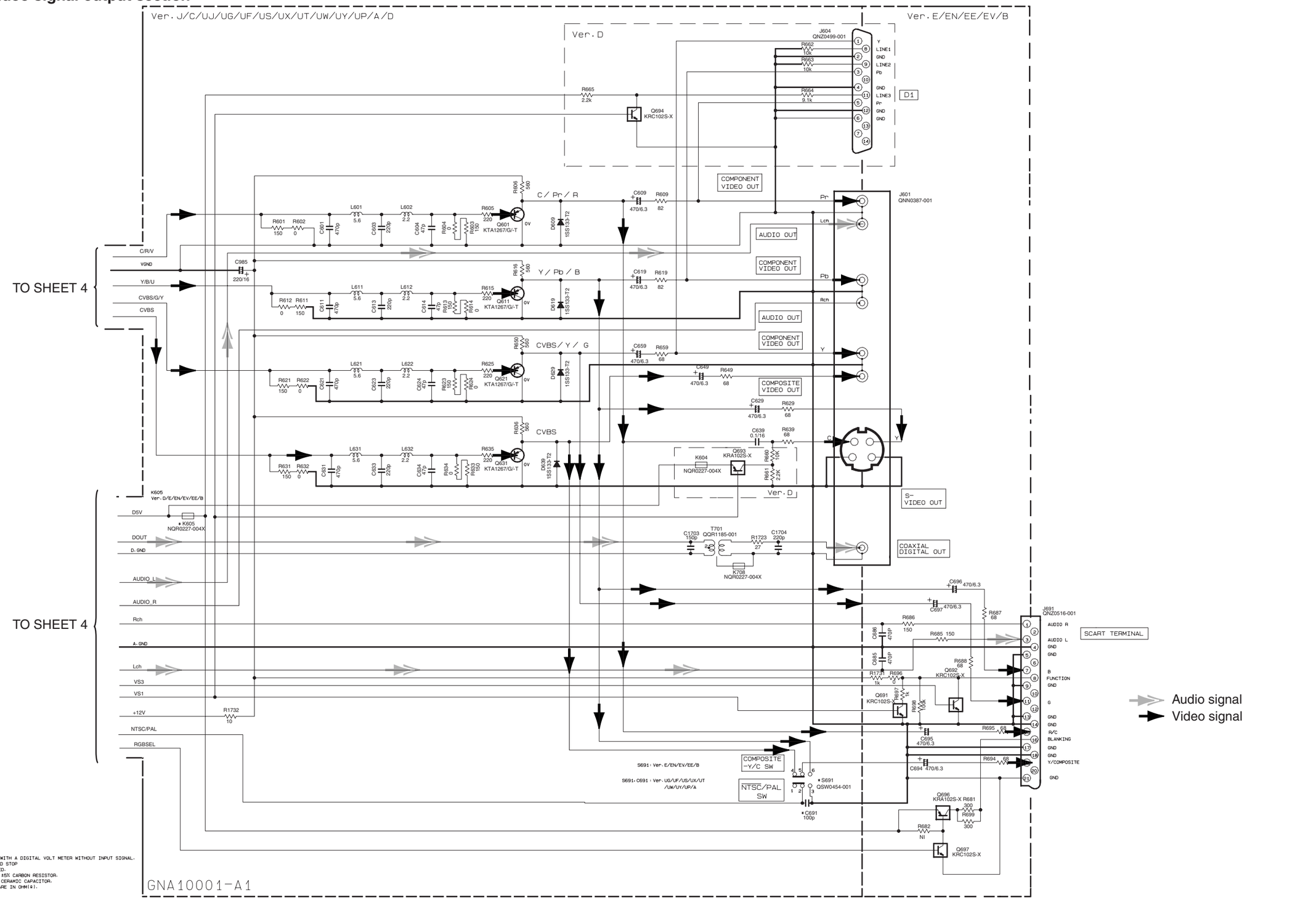
REF NO \ Ver	J/C/D	B/E/EN/EV/EE/A	UG/UF/US/UX/UT UW/UY/UP/UJ
F901	QMF51U1-1R6-J8 1.6A-125V	QMF51E2-1R6-J1 T1.6A-250V	QMF51E2-1R6-J1 T1.6A-250V
K902	QQR11B3-001Z	0	0
HS901	NONE	E70306-002	E70306-002
C907	150/200	B2/400	120/400
C905	NONE	NONE	NONE

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

XV-S40BK/S42SL/S45GD/S30BK/E100SL (MK2) SHEET 2

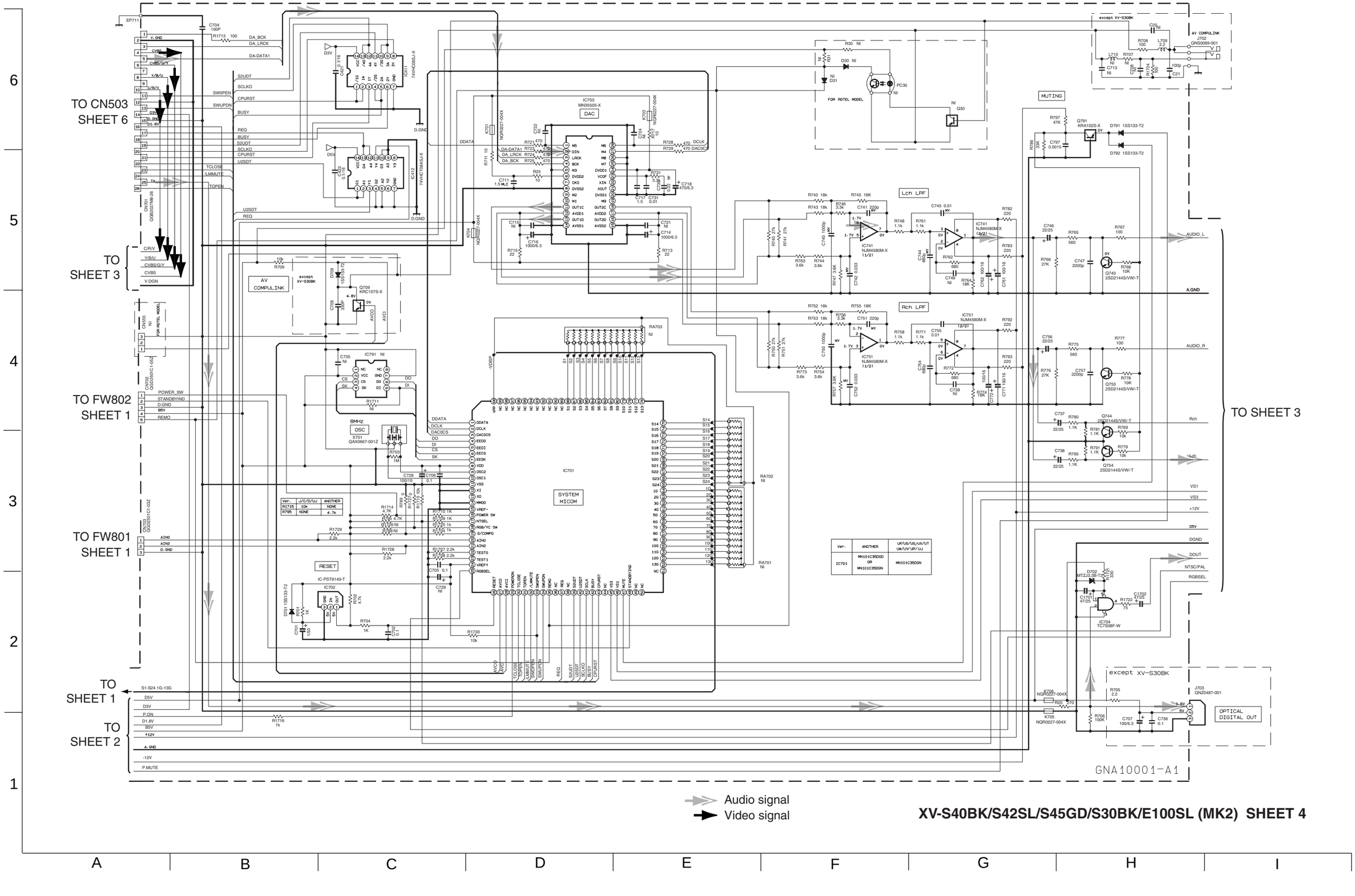
XV-S40BK/XV-S42SL/XV-S45GD
XV-S30BK/XV-E100SL

■ Audio / video signal output section



XV-S40BK/S42SL/S45GD/S30BK/E100SL (MK2) SHEET 3

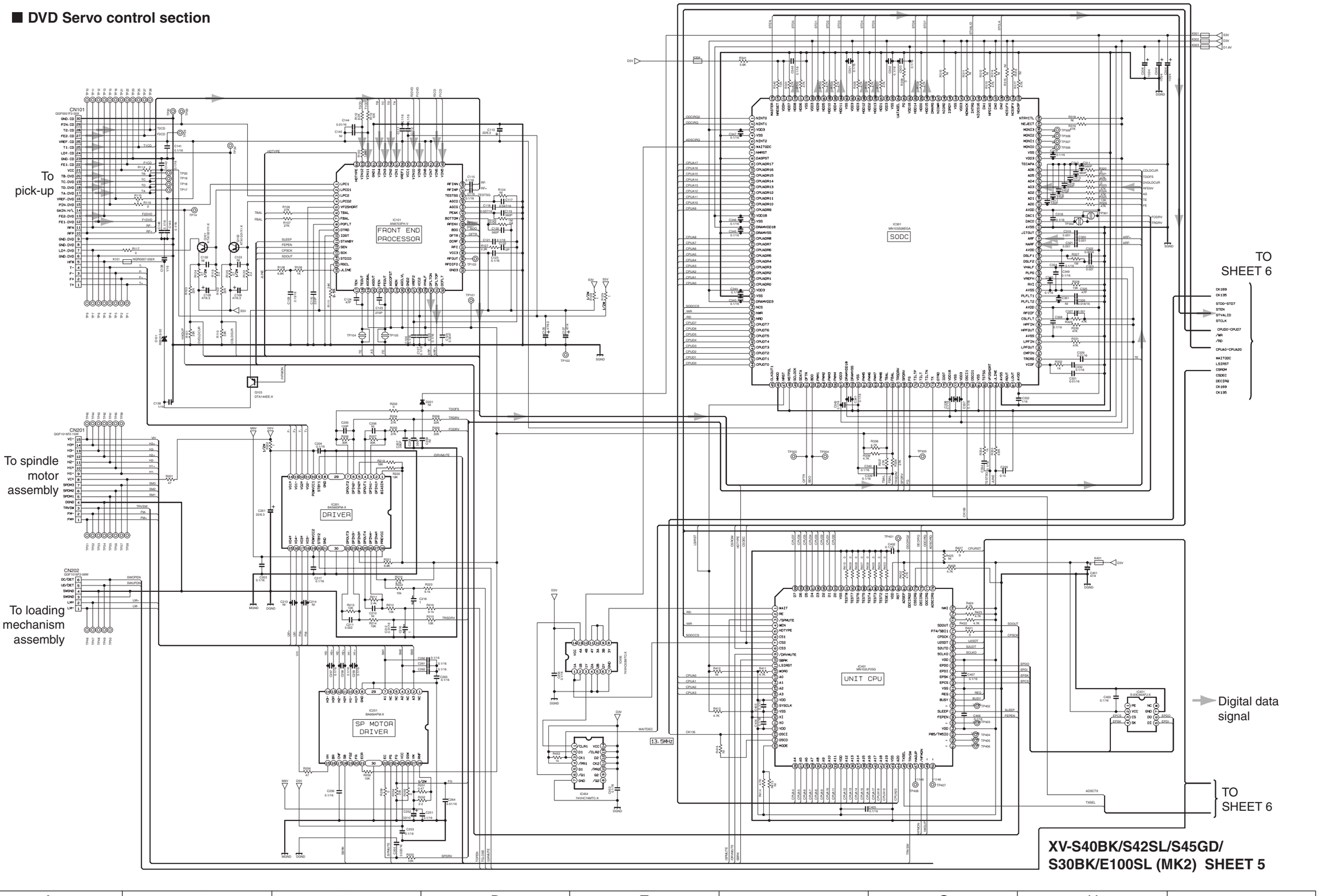
■ System control & audio signal DAC section



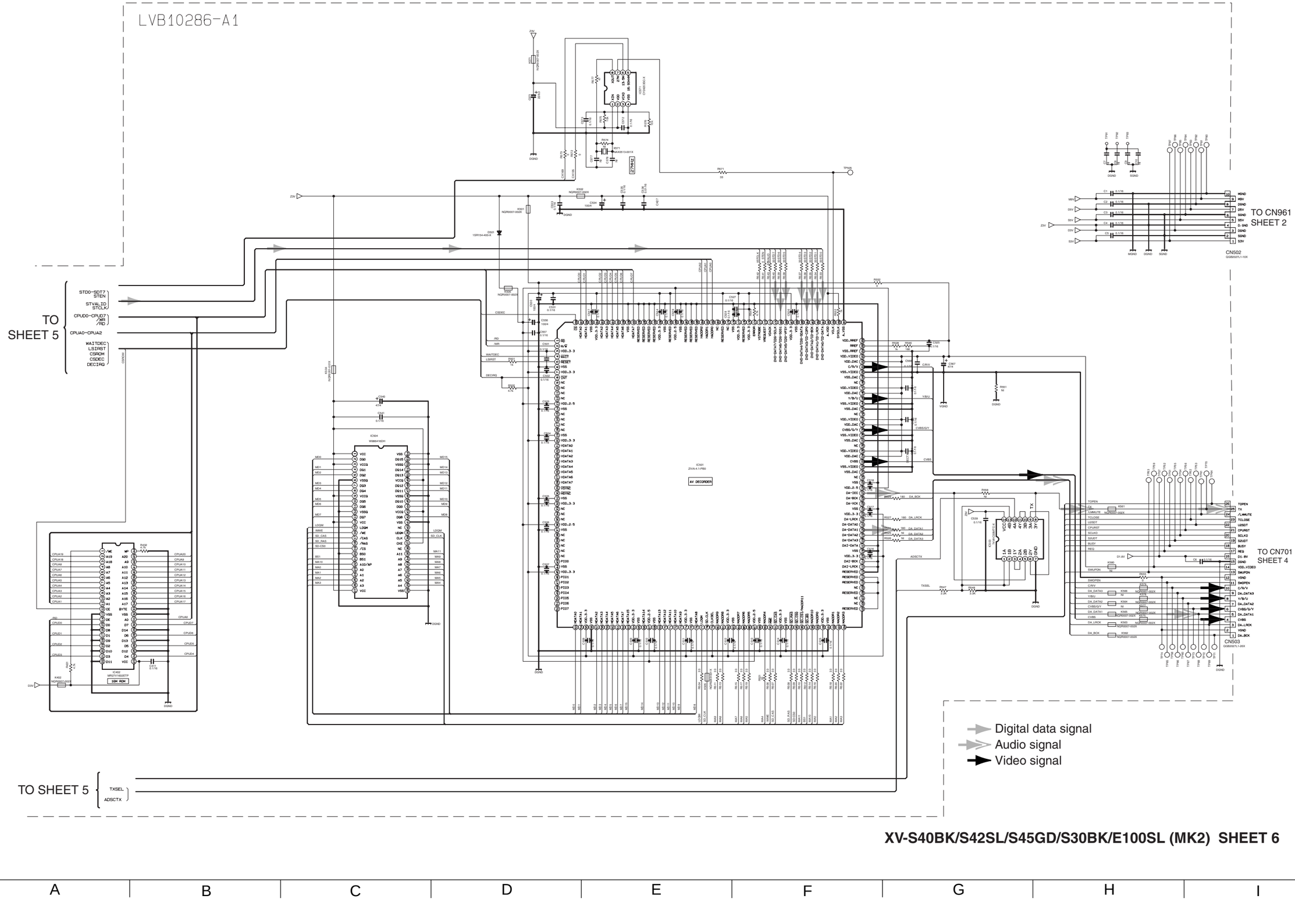
XV-S40BK/S42SL/S45GD/S30BK/E100SL (MK2) SHEET 4

XV-S40BK/XV-S42SL/XV-S45GD
XV-S30BK/XV-E100SL

■ DVD Servo control section



■ AV Decoder section

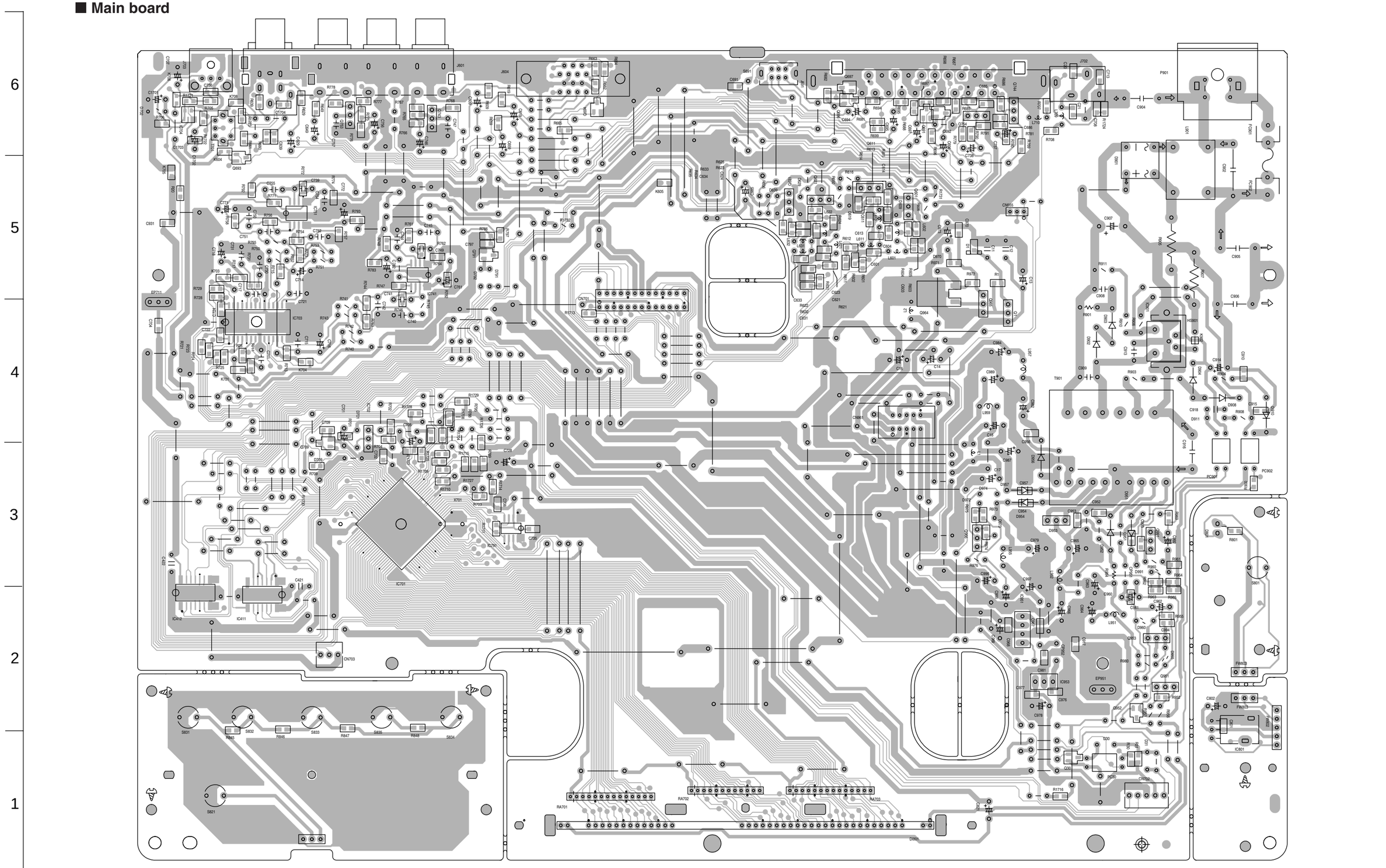


XV-S40BK/S42SL/S45GD/S30BK/E100SL (MK2) SHEET 6

XV-S40BK/XV-S42SL/XV-S45GD
XV-S30BK/XV-E100SL

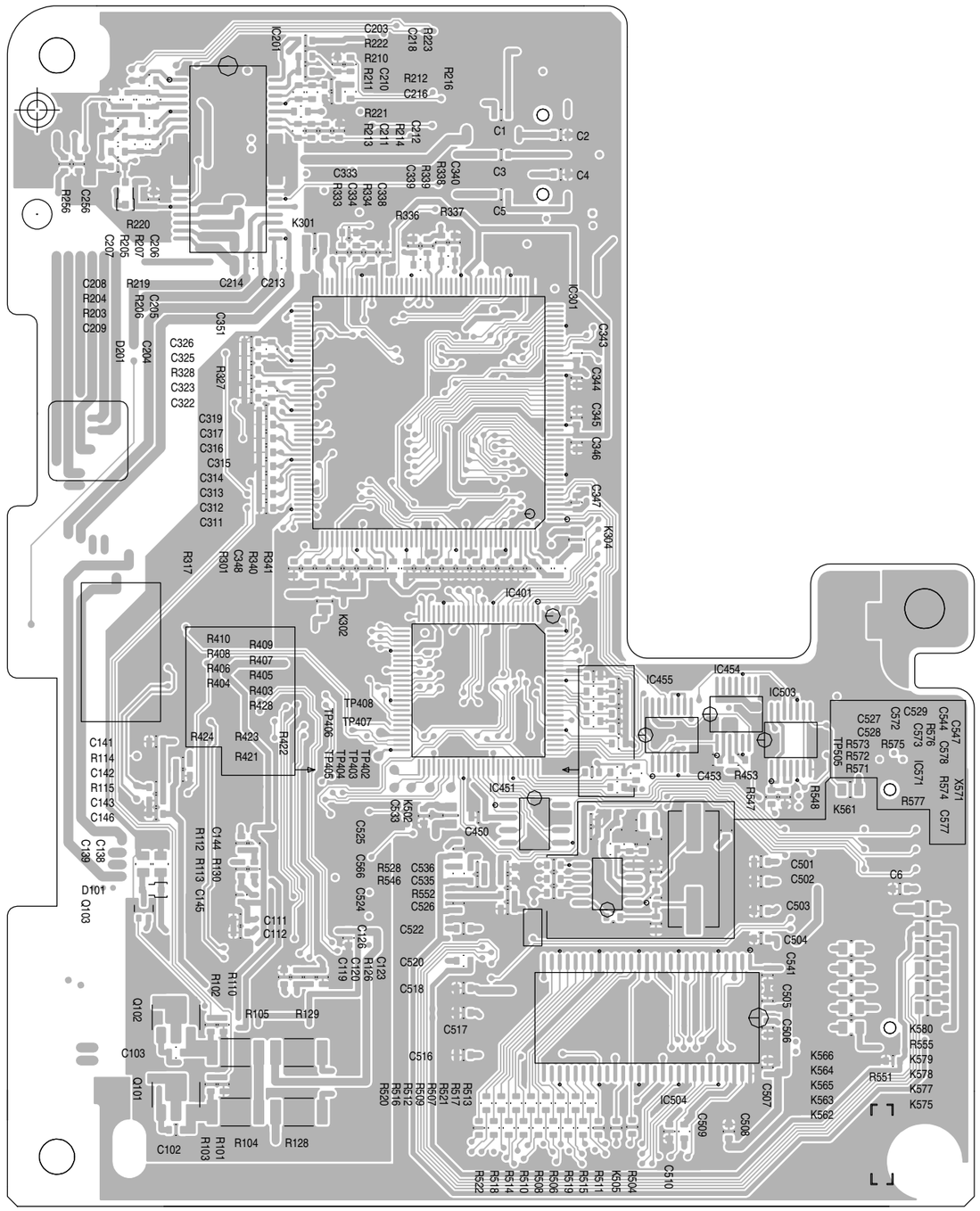
Printed circuit boards

■ Main board

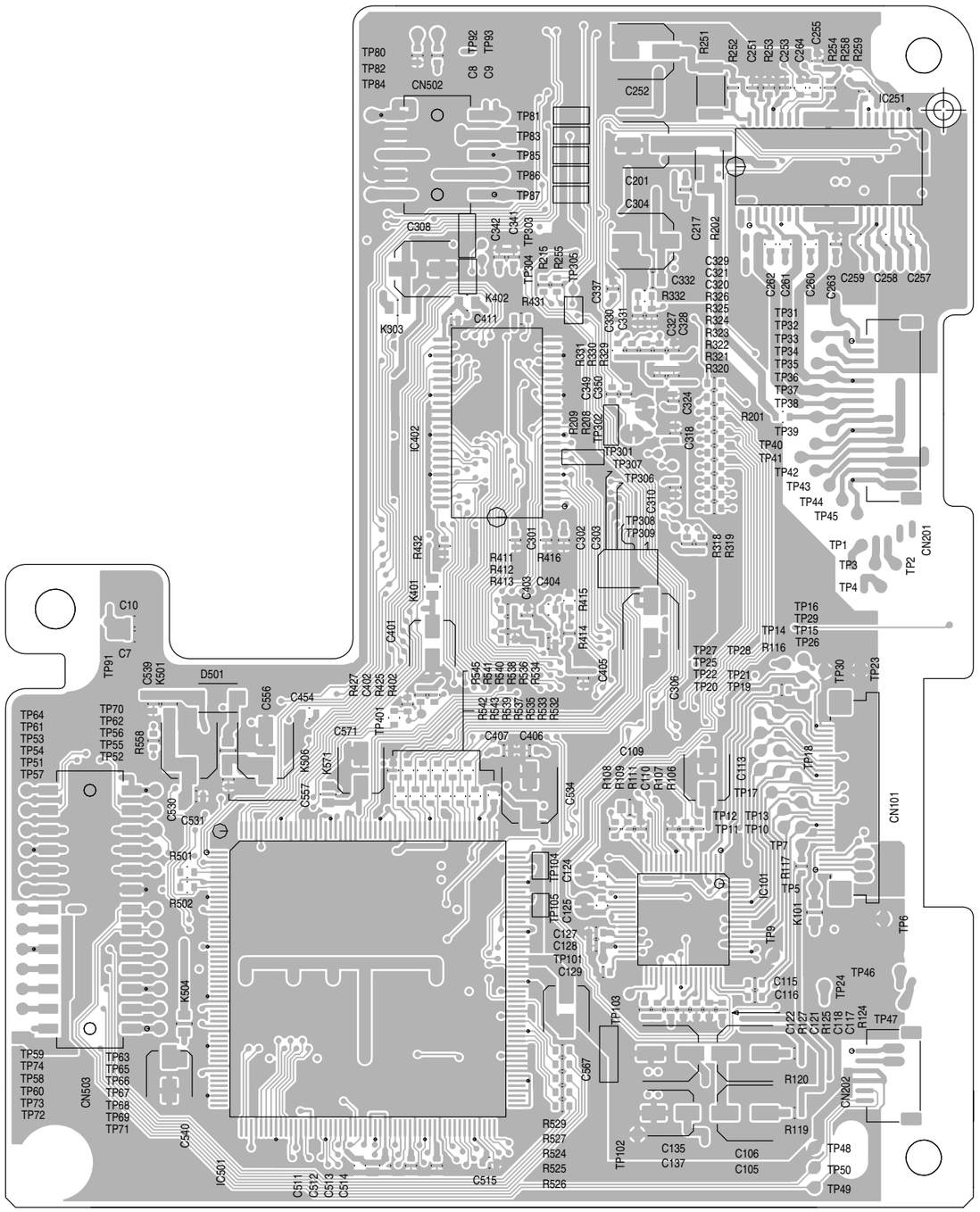


■ DVD Servo control board

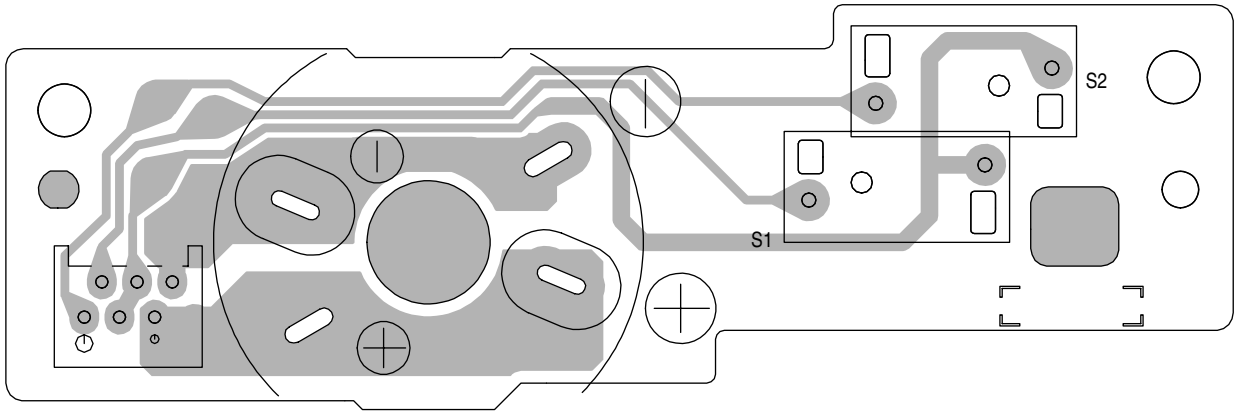
(Forward side)



(Reverse side)



■ Loading motor board



PARTS LIST

[XV-S40BK/XV-S42SL/XV-S45GD
[XV-S30BK/XV-E100SL]

* All printed circuit boards and its assemblies are not available as service parts.

Area Suffix
(XV-S30BK/XV-S40BK)
C ---- Canada
J ----- U.S.A.

Area Suffix (XV-S42SL)
A ------ Australia
C ------ Canada
UG --- Turkey, South Africa, Egypt
UP ---- Korea
US ---- Singapore
UW --- Brazil, Mexico, Peru

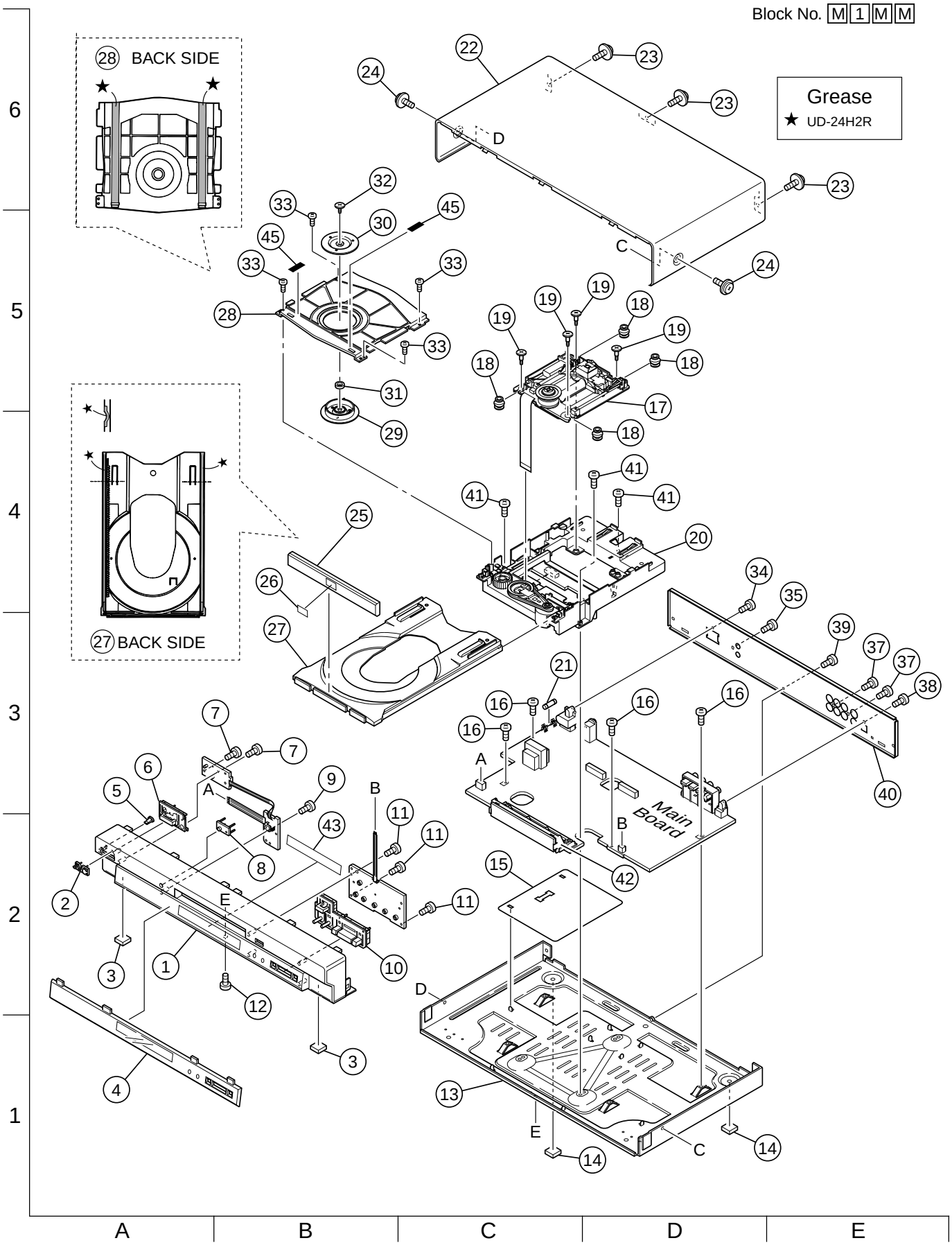
Area Suffix (XV-S45GD)
J ------ U.S.A.

Area Suffix (XV-E100SL)
J ------ U.S.A.
C ------ Canada
UB ---- Hong Kong
UP ---- Korea
US ---- Singapore

- Contents -

Exploded view of general assembly and parts list ---------- 3-2
DVD Traverse mechanism assembly and parts list ---------- 3-5
DVD Loading mechanism assembly and parts list ---------- 3-7
Electrical parts list ---------- 3-9
Packing materials and accessories parts list ---------- 3-16

Exploded view of general assembly and parts list



■ **Parts list (General assembly)** **Block No. M1MM**

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LE10251-246A	FRONT PANEL	1		1,2
		LE10251-244A	FRONT PANEL	1		5,7,8,9,10
		LE10251-245A	FRONT PANEL	1		11
		LE10251-247A	FRONT PANEL	1		12,13
		LE10251-248A	FRONT PANEL	1		14,15,16
		LE10251-241A	FRONT PANEL	1		3,4
		LE10251-243A	FRONT PANEL	1		6
	2	GN40006-001A	JVC MARK	1		1,2,3,4,11
		GN40006-002A	JVC MARK	1		5-10,12-16
	3	E75896-001	FELT SPACER	2		1-11
		LE40798-001A	SPACER	2		12,13,14,15,16
	4	LE30898-001A	WINDOW SCREEN	1		1,2
		LE20535-006A	WINDOW SCREEN	1		5,7,8,9,10
		LE20535-005A	WINDOW SCREEN	1		3,4,6,11
		LE20535-011A	WINDOW SCREEN	1		12,13
		LE20535-002A	WINDOW SCREEN	1		14,15,16
	5	LE30900-001A	INDICATOR	1		
	6	LE20537-001A	PUSH BUTTON	1		1,2,3,4
		LE20537-002A	PUSH BUTTON	1		5-10,12-16
		LE20537-003A	PUSH BUTTON	1		11
	7	QYSBSF2608Z	T.SCREW	2		
	8	LE30899-001A	REMOTE LENS	1		1,2,3,4
		LE30899-002A	REMOTE LENS	1		5-16
	9	QYSBSF2608Z	T.SCREW	1		
	10	LE20538-001A	PUSH BUTTON	1		1,2,3,4
		LE20538-002A	PUSH BUTTON	1		5-10,12-16
		LE20538-003A	PUSH BUTTON	1		11
	11	QYSBSF2608Z	T.SCREW	3		
	12	QYSDSG3008M	SCREW	1		1,2,3,4
		QYSDSG3008N	T.SCREW	1		5-16
	13	LE10250-002A	CHASSIS BASE	1		
	14	E75896-001	FELT SPACER	2		1-11
		LE40798-001A	SPACER	2		12,13,14,15,16
	15	LE40768-002A	PROTECT SHEET	1		1-4,6,11-13
		LE40768-003A	PROTECT SHEET	1		5,7-10,14-16
	16	QYSBSGG3008E	T.SCREW	4		
	17	---------	TRAVERSE MECHANISM	1	See 3-5 page	
	18	LV41659-201A	INSULATOR	4		
	19	LV41424-001A	SPECIAL SCREW	4		
	20	---------	LOADING MECHANISM	1	See 3-7 page	
⚠	21	QMF51U1-1R6-J8	FUSE	1		1-4,6,11-13
⚠		QMF51E2-1R6-J1	FUSE	1		5,7-10,14-16
	22	LE20541-001A/S/	METAL COVER	1		1,2,3,4
		LE20541-002A/S/	METAL COVER	1		5-10,12-16
		LE20541-003A/S/	METAL COVER	1		11
	23	QYSBSGG3008E	T.SCREW	3		

Explanation of area column

1	=XV-S30BK ver. C	5	=XV-S42SL ver. A	9	=XV-S42SL ver. US	13	=XV-E100SL ver. C
2	=XV-S30BK ver. J	6	=XV-S42SL ver. C	10	=XV-S42SL ver. UW	14	=XV-E100SL ver. UB
3	=XV-S40BK ver. C	7	=XV-S42SL ver. UG	11	=XV-S45GD ver. J	15	=XV-E100SL ver. UP
4	=XV-S40BK ver. J	8	=XV-S42SL ver. UP	12	=XV-E100SL ver. J	16	=XV-E100SL ver. US

■ **Parts list (General assembly)** **Block No. M1MM**

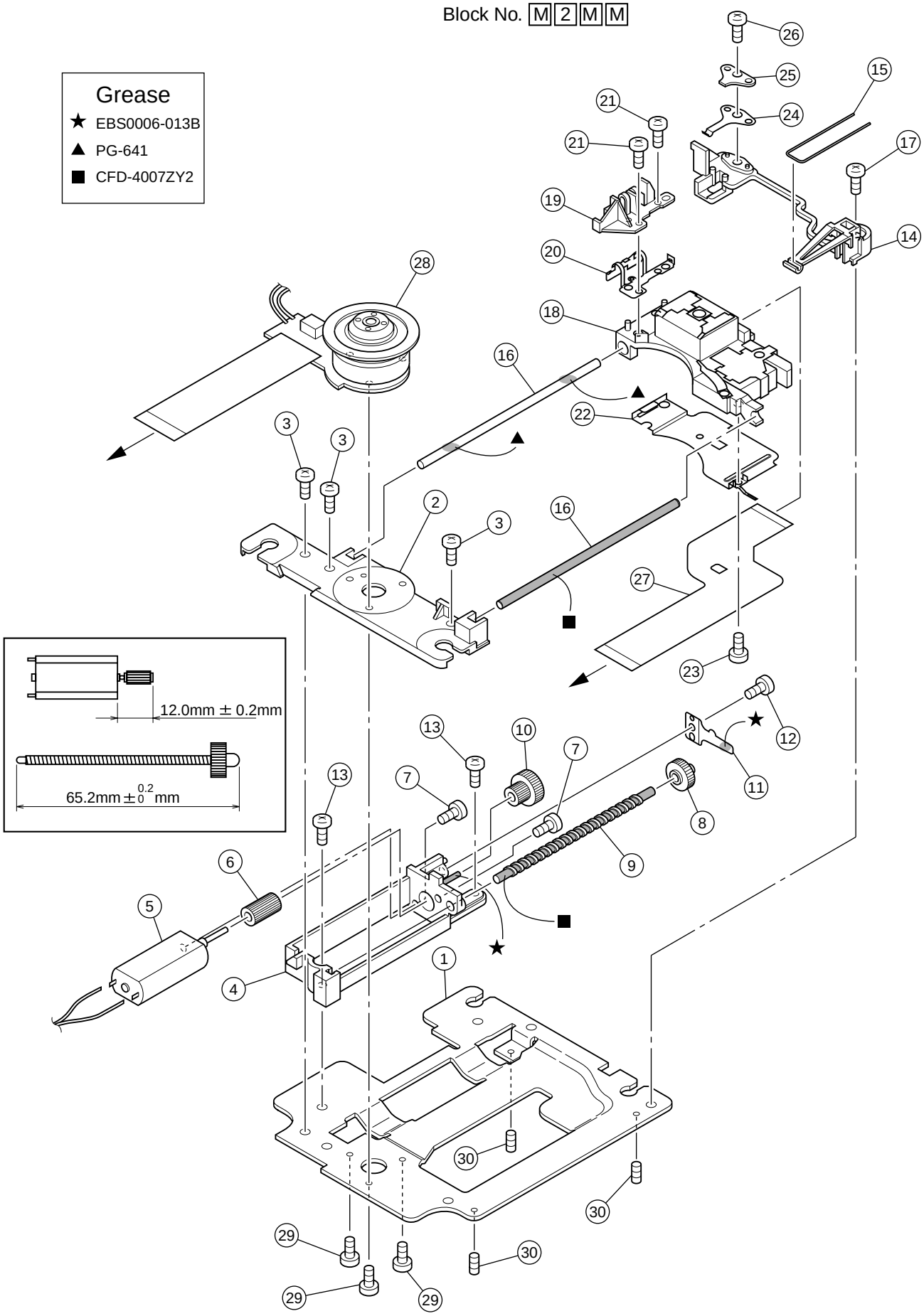
⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	24	E406308-003	SPECIAL SCREW	2		1,2,3,4
		E406308-004	SPECIAL SCREW	2		5-16
	25	LE20536-001A	FITTING	1		1,2,3,4
		LE20536-002A	FITTING	1		5,6,7,8,9,10
		LE20536-003A	FITTING	1		11
		LE20536-005A	FITTING	1		12,13,14,15,16
	26	LE40757-002A	MARK	1		12,13,14,15,16
	27	LV10455-002A	TRAY	1		
	28	LV20913-002A	CLAMPER BASE	1		
	29	LV32417-001A	CLAMPER	1		
	30	LV42089-001A	YOKE	1		
	31	LV41118-003A	MAGNET	1		
	32	LV41741-001A	SPECIAL SCREW	1		
	33	QYSBSF2008Z	SCREW	4		
	34	QYSBSGY3008M	SPECIAL SCREW	1	AC INLET	
	35	QYSBSGY3008M	SPECIAL SCREW	1	COMPU LINK	3-16
	37	QYSBSGY3008M	SPECIAL SCREW	2	VIDEO OUT	
	38	QYSBSGY3008M	SPECIAL SCREW	1	OPTICAL OUT	3-16
	39	QYSBSGY3008M	SPECIAL SCREW	1	REAR + CHASSIS	
	40	LE20542-029A	REAR PANEL	1		1,2
		LE20542-026A	REAR PANEL	1		10
		LE20542-028A	REAR PANEL	1		11
		LE20542-049A	REAR PANEL	1		12,13
		LE20542-050A	REAR PANEL	1		14,16
		LE20542-052A	REAR PANEL	1		15
		LE20542-023A	REAR PANEL	1		3,4
		LE20542-014A	REAR PANEL	1		5
		LE20542-025A	REAR PANEL	1		6
		LE20542-008A	REAR PANEL	1		7
		LE20542-022A	REAR PANEL	1		8
		LE20542-010A	REAR PANEL	1		9
	41	QYSBSG3010E	T.SCREW	3		
	42	LE20540-001A	FL HOLDER	1		
	43	LE40759-001A	FL SCREEN	1		12,13,14,15,16
	45	LE30001-031A	SPACER	2		1-4,6,11-13

Explanation of area column

1	=XV-S30BK ver. C	5	=XV-S42SL ver. A	9	=XV-S42SL ver. US	13	=XV-E100SL ver. C
2	=XV-S30BK ver. J	6	=XV-S42SL ver. C	10	=XV-S42SL ver. UW	14	=XV-E100SL ver. UB
3	=XV-S40BK ver. C	7	=XV-S42SL ver. UG	11	=XV-S45GD ver. J	15	=XV-E100SL ver. UP
4	=XV-S40BK ver. J	8	=XV-S42SL ver. UP	12	=XV-E100SL ver. J	16	=XV-E100SL ver. US

DVD Traverse mechanism assembly and parts list

Block No. M2MM



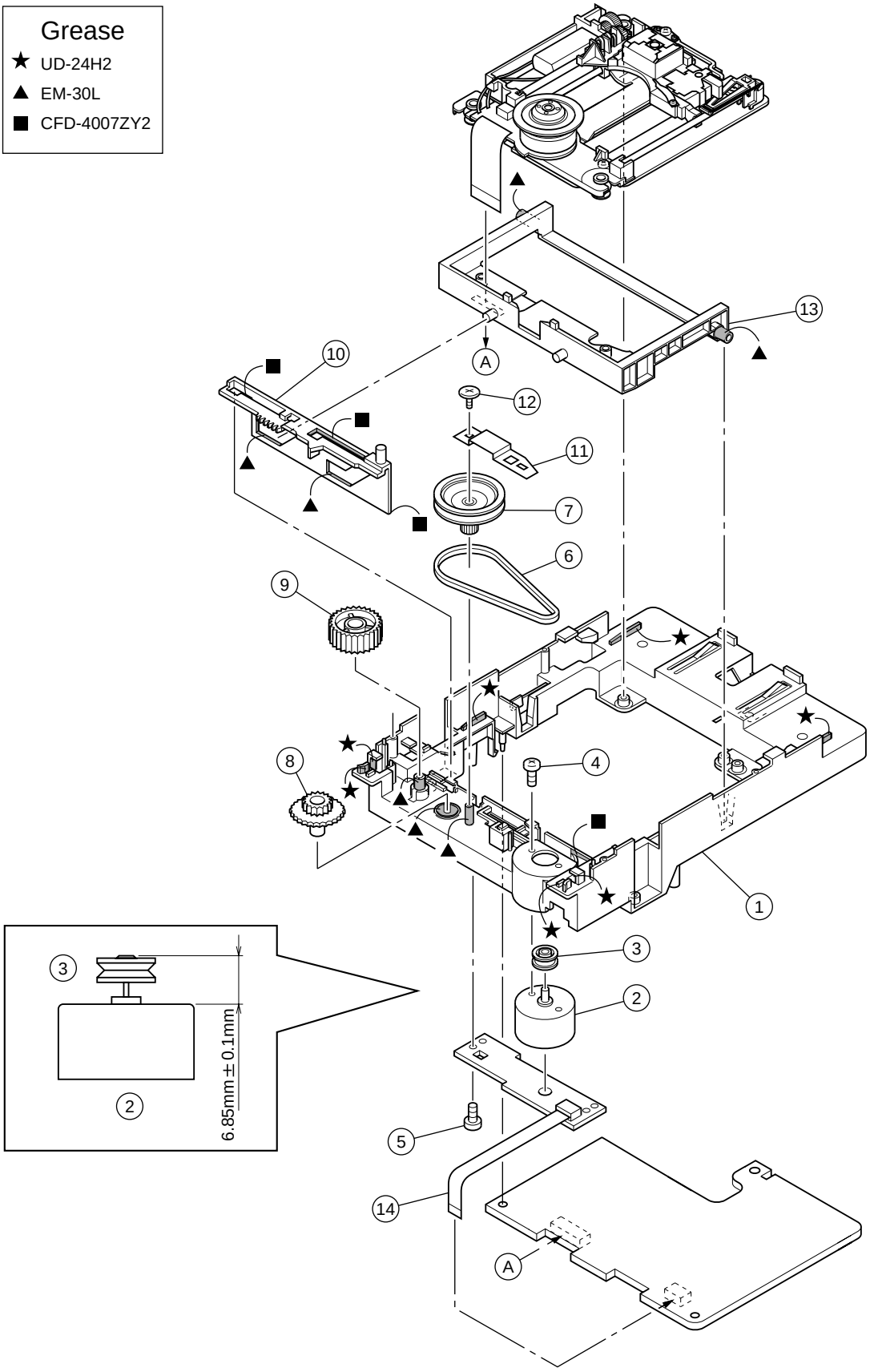
■ Parts list (DVD Traverse mechanism assembly)

Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LE20520-002A	MECHA BASE	1		
	2	LE20516-001A	SPINDLE BASE	1		
	3	QYSDST2605M	TAPPING SCREW	3		
	4	LE30909-001A	HOLDER	1		
	5	QAR0165-001	FEED MOTOR	1		
	6	LV41510-001A	FEED GEAR	1		
	7	QYSPSPU2040M	SCREW	2		
	8	LV41512-001A	FEED GEAR	1		
	9	LV41517-003A	LEAD SCREW	1		
	10	LV41511-002A	FEED GEAR	1		
	11	LE40742-001A	TORSION SPRING	1		
	12	QYSDSF2005Z	SCREW	1		
	13	QYSDST2605M	TAPPING SCREW	2		
	14	LE20517-001A	HOLDER	1		
	15	LE40744-001A	SPRING	1		
	16	LV41121-002A	SLIDE SHAFT	2		
	17	QYSDST2605M	TAPPING SCREW	1		
	18	QAL0342-001	OPTICAL PICK-UP	1		
	19	LE20519-001A	ACTUATOR	1		
	20	LE30886-001A	SPRING	1		
	21	QYSPSFU1740Z	SCREW	2		
	22	LE30888-003A	SPRING	1		
	23	QYSPSGU1430Z	SCREW	1		
	24	LE40743-001A	SPRING	1		
	25	LE40774-001A	PLATE	1		
	26	QYSDST2606Z	SCREW	1		
	27	QAL0284-001	F.P.C.WIRE ASSY	1		
	28	QAR0162-001	SPINDLE MOTOR	1		
	29	QYSPSPU1760Z	SCREW	3		
	30	QYYASPF2608N	SCREW	3		

DVD Loading mechanism assembly and parts list

Block No. M 3 M M



■ Parts list (DVD Loading mechanism assembly)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10454-007A	LOADING BASE	1		
	2	QAR0164-001	MOTOR	1		
	3	LV42087-001A	MOTOR PULLEY	1		
	4	QYSPSPU1730Z	SCREW	1		
	5	VKZ4777-003	MINI SCREW	1		
	6	LV42209-001A	BELT	1		
	7	LV42084-002A	PULLEYGEAR	1		
	8	LV42085-002A	MIDDLE GEAR	1		
	9	LV42086-001A	IDLE GEAR	1		
	10	LV32514-002A	SLIDE CAM	1		
	11	LV42348-001A	GEAR BRACKET	1		
	12	QYSBSF2006Z	SCREW	1		
	13	LV20912-002A	ELEVATOR	1		
	14	QUQ110-0610AJ	FFC WIRE	1		

■ Electrical parts list (Loading motor board)

Block No. 03

⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGF1016F3-06	CONNECTOR		
	S 1	QSW0910-002	SWITCH		
	S 2	QSW0910-002	SWITCH		

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	BK801	LE20539-001A	FL HOLDER		
	C 11	QCBB1HK-104Y	C CAPACITOR	.10MF 10% 50V	
	C 12	QCBB1HK-104Y	C CAPACITOR	.10MF 10% 50V	
	C 13	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 14	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 15	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 16	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 17	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 21	NCS31HJ-101X	C.CAPA. C.M		
	C 421	QCBB1HK-104Y	C CAPACITOR	.10MF 10% 50V	
	C 422	QCBB1HK-104Y	C CAPACITOR	.10MF 10% 50V	
	C 601	NCS31HJ-471X	C CAPACITOR		
	C 603	NCS31HJ-221X	C.CAPA. C.M		
	C 604	NCS31HJ-470X	C.CAPA. C.M		
	C 609	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 611	NCS31HJ-471X	C CAPACITOR		
	C 613	NCS31HJ-221X	C.CAPA. C.M		
	C 614	NCS31HJ-470X	C.CAPA. C.M		
	C 619	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 621	NCS31HJ-471X	C CAPACITOR		
	C 623	NCS31HJ-221X	C.CAPA. C.M		
	C 624	NCS31HJ-470X	C.CAPA. C.M		
	C 629	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 631	NCS31HJ-471X	C CAPACITOR		
	C 633	NCS31HJ-221X	C.CAPA. C.M		
	C 634	NCS31HJ-470X	C.CAPA. C.M		
	C 639	NCB31CK-104X	C CAPACITOR		
	C 649	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 659	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 691	NCS31HJ-101X	C.CAPA. C.M		5,7-10,14-16
	C 701	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 702	NCB31CK-104X	C CAPACITOR		
	C 704	NCS31HJ-101X	C.CAPA. C.M		
	C 705	NCB31CK-104X	C CAPACITOR		
	C 706	NCB31CK-104X	C CAPACITOR		
	C 707	QETN0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 709	NCS31HJ-331X	C.CAPA. C.M		
	C 711	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 714	QETN0JM-108Z	E CAPACITOR	1000MF 20% 6.3V	
	C 716	QETN0JM-108Z	E CAPACITOR	1000MF 20% 6.3V	
	C 717	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 718	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 728	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 730	QFV21HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
	C 731	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 736	NCB31CK-104X	C CAPACITOR		
	C 739	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 740	QFN31HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C 741	QFN31HJ-221Z	M CAPACITOR	220PF 5% 50V	
	C 742	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	
	C 744	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 745	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 746	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 747	QFN31HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C 750	QFN31HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C 751	QFN31HJ-221Z	M CAPACITOR	220PF 5% 50V	
	C 752	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	
	C 754	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 755	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 756	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 757	QFN31HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C 761	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 762	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 771	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 772	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 797	NCB31HK-152X	C CAPACITOR		
	C 801	NCB31CK-104X	C CAPACITOR		
	C 802	QEKC1AM-476Z	E CAPACITOR	47MF 20% 10V	
	C 821	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
⚠	C 902	QFZ9075-683	M CAPACITOR	.068MF	
⚠	C 906	QCZ9079-102	C CAPACITOR	1000PF	
⚠	C 907	QETM2DM-157	E CAPACITOR	150MF 20%	1-4,6,11-13
⚠	C 907	QEZ0522-127	E CAPACITOR	120MF	7-10,14-16
⚠	C 907	QEZ0452-826	E CAPACITOR	82MF	5
	C 908	NZZ000000000500	C CAPACITOR		
	C 909	NZZ000000000499	C CAPACITOR		
	C 910	NCS31HJ-221X	C.CAPA. C.M		
	C 913	NZZ000000000499	C CAPACITOR		
	C 914	QEMX1EM-396Z	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 914	QEZ0532-396Z	E CAPACITOR	39MF	5,7-10,12-16
	C 915	NCB31HK-471X	C CAPACITOR		
⚠	C 916	QCZ9079-332	C CAPACITOR	3300PF	
	C 917	NCB31CK-104X	C CAPACITOR		
	C 918	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C 951	NCS31HJ-101X	C.CAPA. C.M		
	C 952	NCS31HJ-101X	C.CAPA. C.M		
	C 953	NCS31HJ-101X	C.CAPA. C.M		
	C 954	NCS31HJ-101X	C.CAPA. C.M		
	C 956	NCS31HJ-101X	C.CAPA. C.M		
	C 957	NCS31HJ-101X	C.CAPA. C.M		
	C 960	QEMX1AM-826Z	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 960	QEZ0529-826Z	E CAPACITOR	82MF	5,7-10,12-16
	C 961	NCB31CK-104X	C CAPACITOR		
	C 962	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 963	QEMX1HM-396Z	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 963	QEZ0533-396Z	E CAPACITOR	39MF	5,7-10,12-16
	C 964	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 965	QEMW1AM-108	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 965	QEZ0528-108	E CAPACITOR	1000MF	5,7-10,12-16
	C 966	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 967	NCB31CK-104X	C CAPACITOR		
	C 968	NCB31CK-104X	C CAPACITOR		
	C 969	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 970	NCB31CK-104X	C CAPACITOR		
	C 973	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 976	NCB31CK-104X	C CAPACITOR		
	C 977	NCB31CK-104X	C CAPACITOR		
	C 978	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 979	QEMW1CM-827	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 979	QEZ0530-827	E CAPACITOR	820MF	5,7-10,12-16
	C 981	NCB31CK-104X	C CAPACITOR		
	C 982	QEMW1EM-567	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 982	QEZ0531-567	E CAPACITOR	560MF	5,7-10,12-16
	C 984	QETN1EM-227Z	E CAPACITOR	220MF 20% 25V	
	C 985	QETN1CM-227Z	E CAPACITOR	220MF 20% 16V	
	C 987	QEMX1EM-187Z	E CAPACITOR	OR USE PARTS	1-4,6,11
	C 987	QEZ0532-187Z	E CAPACITOR	180MF	5,7-10,12-16
	C 989	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 992	QETN1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C 993	NCS31HJ-101X	C.CAPA. C.M		
	C 994	NCB31EK-223X	C CAPACITOR		
	C 995	QETN1CM-227Z	E CAPACITOR	220MF 20% 16V	
	C 996	QETN1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 997	QETN1CM-227Z	E CAPACITOR	220MF 20% 16V	

Explanation of area column

1	=XV-S30BK	ver. C	5	=XV-S42SL	ver. A	9	=XV-S42SL	ver. US	13	=XV-E100SL	ver. C
2	=XV-S30BK	ver. J	6	=XV-S42SL	ver. C	10	=XV-S42SL	ver. UW	14	=XV-E100SL	ver. UB
3	=XV-S40BK	ver. C	7	=XV-S42SL	ver. UG	11	=XV-S45GD	ver. J	15	=XV-E100SL	ver. UP
4	=XV-S40BK	ver. J	8	=XV-S42SL	ver. UP	12	=XV-E100SL	ver. J	16	=XV-E100SL	ver. US

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C1701	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1702	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1703	NCS31HJ-151X	C CAPACITOR		
	C1704	NCS31HJ-221X	C.CAPA. C.M		
	CN701	QGB2027M8-26	CONNECTOR		
	CN702	QGD2501C1-05Z	SOCKET I.M		
	CN703	QGD2501C1-03Z	SOCKET		
	CN961	QGB2027M8-10	CONNECTOR		
⚠	CP951	ICP-N10-T	ICP		
⚠	CP952	ICP-N5-T	ICP		
	D 1	HZU2.4B-X	MG.RES C.M		
	D 609	1SS133-T2	SI DIODE IM		
	D 619	1SS133-T2	SI DIODE IM		
	D 629	1SS133-T2	SI DIODE IM		
	D 639	1SS133-T2	SI DIODE IM		
	D 701	1SS133-T2	SI DIODE IM		
	D 702	MTZJ3.3B-T2	ZENER DIODE IM		
	D 709	1SS133-T2	SI DIODE IM		
	D 791	1SS133-T2	SI DIODE IM		
	D 792	1SS133-T2	SI DIODE IM		
	D 801	SLR-342VC-T	LED	STANDBY	
⚠	D 901	S1WB/A/60-4101	BRIDGE DIODE		
⚠	D 902	F1T4-T2	FR DIODE		
⚠	D 903	F1T4-T2	FR DIODE		
⚠	D 904	F1T4-T2	FR DIODE		
⚠	D 908	F1T4-T2	FR DIODE		
⚠	D 910	F1T4-T2	FR DIODE		
	D 911	1SS133-T2	SI DIODE IM		
	D 950	MTZJ36C-T2	Z.DIODE I.M		
⚠	D 951	F1T4-T2	FR DIODE		
⚠	D 952	F1T4-T2	FR DIODE		
⚠	D 953	FMB-24	FUSEIODE		
⚠	D 954	F1T4-T2	FR DIODE		
⚠	D 956	F1T4-T2	FR DIODE		
⚠	D 957	F1T4-T2	FR DIODE		
	D 960	MTZJ4.7B-T2	Z DIODE I M		
	D 970	1SS133-T2	SI DIODE IM		
	D 972	1SS133-T2	SI DIODE IM		
	D 973	1SS133-T2	SI DIODE IM		
	D 974	1SS133-T2	SI DIODE IM		
	D 991	MTZJ5.1C-T2	ZENER DIODE		
	DI801	QLF0085-001	FL TUBE		
	EP711	QNZ0136-001Z	EARTH PLATE		
	EP951	QNZ0136-001Z	EARTH PLATE		
	FC901	QNG0003-001Z	FUSE CLIP		
	FC902	QNG0003-001Z	FUSE CLIP		
	FL901	LV41385-010A	FUSE LABEL		5,7-10,14-16
	HS901	E70306-002	HEAT SINK		5,7-10,14-16
	IC411	74VHC08SJ-X	IC		
	IC412	74VHCT08ASJ-X	IC		
	IC701	MN101C35DGN	IC	SYSTEM MICOM	
	IC702	IC-PST9140-T	IC		
	IC703	MN35505-X	IC C M		
	IC704	TC7SH08F-X	IC C.M .		
	IC741	NJM4580M-X	IC		
	IC751	NJM4580M-X	IC		
	IC801	GP1U271X	RM RECIVER		
⚠	IC901	STR-G6651	IC		
	IC951	PQ05RD21	IC		
⚠	IC953	NJM78M05FA	IC		
	J 601	QNN0387-001	PIN JACK	COMPONENT	
	J 702	QNS0089-001	3.5 JACK	AV COMPULINK	

⚠	Item	Parts number	Parts name	Remarks	Area
	J 703	QNZ0487-001	OPT TRANSMITTER	OPT DIGITAL OUT	
	K 701	NQR0227-004X	FERRITE BEADS		
	K 703	NQR0201-018X	INDUCTOR		
	K 704	NQR0201-018X	INDUCTOR		
	K 705	NQR0201-018X	INDUCTOR		
	K 706	NQR0201-018X	INDUCTOR		
	K 708	NQR0201-018X	INDUCTOR		
	K 902	QQR1183-001Z	FERRITE BEADS		1-4,6,11-13
	L 1	QQL231K-100Y	INDUCTOR		
	L 2	QQL231K-100Y	INDUCTOR		
	L 601	QQL231K-5R6Y	INDUCTOR		
	L 602	QQL231K-2R2Y	INDUCTOR		
	L 611	QQL231K-5R6Y	INDUCTOR		
	L 612	QQL231K-2R2Y	INDUCTOR		
	L 621	QQL231K-5R6Y	INDUCTOR		
	L 622	QQL231K-2R2Y	INDUCTOR		
	L 631	QQL231K-5R6Y	INDUCTOR		
	L 632	QQL231K-2R2Y	INDUCTOR		
	L 709	QQL231K-2R2Y	INDUCTOR		
⚠	L 901	QQR1105-001	LINE FILTER		
	L 951	QQL244K-R22Z	INDUCTOR		
	L 952	QQL26AK-220Z	INDUCTOR		
	L 955	QQL26AK-220Z	INDUCTOR		
	L 957	QQL244K-100Z	INDUCTOR		
	L 959	QQL244K-100Z	INDUCTOR		
	P 901	QNC0082-001	AC INLET		1-4,6,11-13
	P 901	QNC0081-001	AC INLET		5,7-10,14-16
⚠	PC901	PC123Y02	IC(PHOTO COUPLE		
⚠	PC902	PC123Y02	IC(PHOTO COUPLE		
	Q 1	2SC2060/QR/-T	TRANSISTOR		
	Q 601	KTA1267/G/-T	TR I/M		
	Q 611	KTA1267/G/-T	TR I/M		
	Q 621	KTA1267/G/-T	TR I/M		
	Q 631	KTA1267/G/-T	TR I/M		
	Q 709	KRC107S-X	DIGITAL.TR		
	Q 743	2SD2144S/VW/-T	TRANSISTOR	AMUTE1	
	Q 753	2SD2144S/VW/-T	TRANSISTOR	AMUTE1	
	Q 791	KRA102S-X	DIGITAL.TR		
	Q 951	KTD863/Y/-T	TRANSISTOR		
	Q 952	KRA104S-X	DIGITAL.TR		
	Q 953	KTA1267/G/-T	TR I/M		
⚠	Q 964	2SB1184/QR/-X	TRANSISTOR		
	Q 965	KTC3199/Y/-T	TR I/M		
	Q 966	KTA1267/G/-T	TR I/M		
	Q 991	KTC3199/Y/-T	TR I/M		
	R 1	NRSA63J-910X	MG RESISTOR		
	R 20	NRSA63J-271X	MG RESISTOR		
	R 25	NRSA63J-100X	MG RESISTOR		
	R 601	NRSA63J-151X	MG RESISTOR		
	R 602	NRSA63J-0R0X	MG RESISTOR		
	R 603	NRSA63J-151X	MG RESISTOR		
	R 604	NRSA63J-0R0X	MG RESISTOR		
	R 605	NRSA63J-221X	MG RESISTOR		
	R 606	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R 609	NRSA63J-820X	MG RESISTOR		
	R 611	NRSA63J-151X	MG RESISTOR		
	R 612	NRSA63J-0R0X	MG RESISTOR		
	R 613	NRSA63J-151X	MG RESISTOR		
	R 614	NRSA63J-0R0X	MG RESISTOR		
	R 615	NRSA63J-221X	MG RESISTOR		
	R 616	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R 619	NRSA63J-820X	MG RESISTOR		

Explanation of area column

1	=XV-S30BK	ver. C	5	=XV-S42SL	ver. A	9	=XV-S42SL	ver. US	13	=XV-E100SL	ver. C
2	=XV-S30BK	ver. J	6	=XV-S42SL	ver. C	10	=XV-S42SL	ver. UW	14	=XV-E100SL	ver. UB
3	=XV-S40BK	ver. C	7	=XV-S42SL	ver. UG	11	=XV-S45GD	ver. J	15	=XV-E100SL	ver. UP
4	=XV-S40BK	ver. J	8	=XV-S42SL	ver. UP	12	=XV-E100SL	ver. J	16	=XV-E100SL	ver. US

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 621	NRSA63J-151X	MG RESISTOR		
	R 622	NRSA63J-0R0X	MG RESISTOR		
	R 623	NRSA63J-151X	MG RESISTOR		
	R 624	NRSA63J-0R0X	MG RESISTOR		
	R 625	NRSA63J-221X	MG RESISTOR		
	R 629	NRSA63J-680X	MG RESISTOR		
	R 631	NRSA63J-151X	MG RESISTOR		
	R 632	NRSA63J-0R0X	MG RESISTOR		
	R 633	NRSA63J-151X	MG RESISTOR		
	R 634	NRSA63J-0R0X	MG RESISTOR		
	R 635	NRSA63J-221X	MG RESISTOR		
	R 636	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R 639	NRSA63J-680X	MG RESISTOR		
	R 649	NRSA63J-680X	MG RESISTOR		
	R 650	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R 659	NRSA63J-680X	MG RESISTOR		
	R 701	NRSA63J-102X	MG RESISTOR		
	R 702	NRSA63J-472X	MG RESISTOR		
	R 703	NRSA63J-105X	MG RESISTOR		
	R 704	NRSA63J-102X	MG RESISTOR		
	R 705	NRSA63J-2R2X	MG RESISTOR		
	R 706	NRSA63J-104X	MG RESISTOR		
	R 708	NRSA63J-101X	MG RESISTOR		
	R 709	NRSA63J-103X	MG RESISTOR		
	R 711	NRSA63J-100X	MG RESISTOR		
	R 713	NRSA63J-470X	MG RESISTOR		
	R 715	NRSA63J-470X	MG RESISTOR		
	R 717	NRSA63J-220X	MG RESISTOR		
	R 721	NRSA63J-471X	MG RESISTOR		
	R 723	NRSA63J-471X	MG RESISTOR		
	R 724	NRSA63J-471X	MG RESISTOR		
	R 725	NRSA63J-471X	MG RESISTOR		
	R 728	NRSA63J-471X	MG RESISTOR		
	R 729	NRSA63J-471X	MG RESISTOR		
	R 731	NRSA63J-332X	MG RESISTOR		
	R 740	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 741	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 742	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 743	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 744	NRSA63J-362X	MG RESISTOR		
	R 745	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 746	NRSA63J-332X	MG RESISTOR		
	R 747	NRSA63J-362X	MG RESISTOR		
	R 748	NRSA63J-112X	MG RESISTOR		
	R 750	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 751	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 752	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 753	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 754	NRSA63J-362X	MG RESISTOR		
	R 755	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 756	NRSA63J-332X	MG RESISTOR		
	R 757	NRSA63J-362X	MG RESISTOR		
	R 758	NRSA63J-112X	MG RESISTOR		
	R 761	NRSA63J-112X	MG RESISTOR		
	R 762	NRSA63J-681X	MG RESISTOR		
	R 763	NRSA63J-362X	MG RESISTOR		
	R 764	NRSA63J-183X	MG RESISTOR		
	R 765	NRSA63J-561X	MG RESISTOR		
	R 766	NRSA63J-273X	MG RESISTOR		
	R 767	NRSA63J-101X	MG RESISTOR		
	R 768	NRSA63J-103X	MG RESISTOR		
	R 771	NRSA63J-112X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 772	NRSA63J-152X	MG RESISTOR		
	R 773	NRSA63J-362X	MG RESISTOR		
	R 774	NRSA63J-183X	MG RESISTOR		
	R 775	NRSA63J-561X	MG RESISTOR		
	R 776	NRSA63J-273X	MG RESISTOR		
	R 777	NRSA63J-101X	MG RESISTOR		
	R 778	NRSA63J-103X	MG RESISTOR		
	R 782	NRSA63J-221X	MG RESISTOR		
	R 783	NRSA63J-221X	MG RESISTOR		
	R 786	NRSA63J-333X	MG RESISTOR		
	R 789	NRSA63J-0R0X	MG RESISTOR		
	R 792	NRSA63J-221X	MG RESISTOR		
	R 793	NRSA63J-221X	MG RESISTOR		
	R 795	NRSA63J-472X	MG RESISTOR		5,7-10,14-16
	R 797	NRSA63J-473X	MG RESISTOR		
	R 801	NRSA63J-331X	MG RESISTOR		
	R 845	NRSA63J-431X	MG RESISTOR		
	R 846	NRSA63J-681X	MG RESISTOR		
	R 847	NRSA63J-112X	MG RESISTOR		
	R 848	NRSA63J-222X	MG RESISTOR		
	R 900	NRSA63J-221X	MG RESISTOR		
	R 901	QRL01DJ-683X	OMF RESISTOR	68K 5% 1/1W	
	R 903	QRE141J-330Y	C RESISTOR	33 5% 1/4W	
	R 904	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 905	QRL027J-683	UNF OMF RESISTOR	68K 5% 1/2W	
	R 906	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
	R 907	QRT022J-R47	MF RESISTOR	5% 1/2W	
	R 908	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 910	QRE141J-754Y	C RESISTOR	750K 5% 1/4W	
	R 911	QRE141J-754Y	C RESISTOR	750K 5% 1/4W	
	R 952	NRSA63J-103X	MG RESISTOR		
	R 953	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
⚠	R 954	QRZ9005-100X	F RESISTOR	10 1/0W	
	R 955	NRSA63J-223X	MG RESISTOR		
	R 956	QRE141J-120Y	C RESISTOR	12 5% 1/4W	
	R 960	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 961	NRSA63J-681X	MG RESISTOR		
	R 962	NRSA63J-105X	MG RESISTOR		
	R 963	NRSA63J-101X	MG RESISTOR		
	R 964	NRSA63J-105X	MG RESISTOR		
	R 965	NRSA63J-103X	MG RESISTOR		
	R 969	NRSA63J-221X	MG RESISTOR		
	R 971	NRSA63J-392X	MG RESISTOR		
	R 972	NRSA63J-122X	MG RESISTOR		
	R 973	NRSA63J-102X	MG RESISTOR		
	R 974	NRSA63J-562X	MG RESISTOR		
	R 975	NRSA63J-562X	MG RESISTOR		
	R 976	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 980	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R1704	NRSA63J-102X	MG RESISTOR		
	R1707	NRSA63J-222X	MG RESISTOR		
	R1708	NRSA63J-222X	MG RESISTOR		
	R1709	NRSA63J-102X	MG RESISTOR		
	R1710	NRSA63J-102X	MG RESISTOR		
	R1713	NRSA63J-101X	MG RESISTOR		
	R1714	NRSA63J-472X	MG RESISTOR		
	R1715	NRSA63J-103X	MG RESISTOR		1-4,6,11-13
	R1716	NRSA63J-102X	MG RESISTOR		
	R1721	NRSA63J-331X	MG RESISTOR		
	R1722	NRSA63J-750X	MG RESISTOR		
	R1723	NRSA63J-270X	MG RESISTOR		
	R1724	NRSA63J-101X	MG RESISTOR	TO C708	

Explanation of area column

1	=XV-S30BK	ver. C	5	=XV-S42SL	ver. A	9	=XV-S42SL	ver. US	13	=XV-E100SL	ver. C
2	=XV-S30BK	ver. J	6	=XV-S42SL	ver. C	10	=XV-S42SL	ver. UW	14	=XV-E100SL	ver. UB
3	=XV-S40BK	ver. C	7	=XV-S42SL	ver. UG	11	=XV-S45GD	ver. J	15	=XV-E100SL	ver. UP
4	=XV-S40BK	ver. J	8	=XV-S42SL	ver. UP	12	=XV-E100SL	ver. J	16	=XV-E100SL	ver. US

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R1725	NRSA63J-102X	MG RESISTOR		
	R1727	NRSA63J-0R0X	MG RESISTOR		
	R1728	NRSA63J-222X	MG RESISTOR		
	R1729	NRSA63J-222X	MG RESISTOR		
	R1730	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1732	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	S 691	QSW0454-001	SWITCH		5,7-10,14-16
	S 801	QSW0651-001Z	TACT SWITCH		
	S 821	QSW0651-001Z	TACT SWITCH		
	S 831	QSW0651-001Z	TACT SWITCH		
	S 832	QSW0651-001Z	TACT SWITCH		
	S 833	QSW0651-001Z	TACT SWITCH		
	S 834	QSW0651-001Z	TACT SWITCH		
	S 835	QSW0651-001Z	TACT SWITCH		
	T 701	QQR1185-001	PULSE TRANS		
⚠	T 901	QQS0100-001	SW TRANSF		
	X 701	QAX0667-001Z	RESONATOR I.M		

Explanation of area column

5 =XV-S42SL ver. A
7 =XV-S42SL ver. UG
8 =XV-S42SL ver. UP
9 =XV-S42SL ver. US
10 =XV-S42SL ver. UW
14 =XV-E100SL ver. UB
15 =XV-E100SL ver. UP
16 =XV-E100SL ver. US

■ **Electrical parts list (Servo control board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB31CK-104X	C CAPACITOR		
	C 2	NCB31CK-104X	C CAPACITOR		
	C 3	NCB31CK-104X	C CAPACITOR		
	C 4	NCB31CK-104X	C CAPACITOR		
	C 5	NCB31CK-104X	C CAPACITOR		
	C 6	NCB31CK-104X	C CAPACITOR		
	C 10	NCS31HJ-470X	C.CAPA. C.M		1-4,6,11-13
	C 105	NEA70JM-476X	E.CAPACITOR		
	C 106	NEA70JM-476X	E.CAPACITOR		
	C 109	NCB21CK-154X	C.CAPA. C.M		
	C 110	NCS31HJ-221X	C.CAPA. C.M		
	C 111	NCB31CK-104X	C CAPACITOR		
	C 112	NCB31CK-104X	C CAPACITOR		
	C 113	NEA70JM-226X	E CAPACITOR		
	C 115	NCB31CK-104X	C CAPACITOR		
	C 116	NCB31CK-104X	C CAPACITOR		
	C 117	NCB31CK-473X	C CAPACITOR		
	C 118	NCB31CK-273X	C CAPACITOR		
	C 119	NCB31HK-561X	C CAPACITOR		
	C 120	NCB31HK-561X	C CAPACITOR		
	C 121	NCB31CK-104X	C CAPACITOR		
	C 122	NCS31HJ-120X	C.CAPA. C.M		
	C 123	NCB31CK-104X	C CAPACITOR		
	C 124	NCS31HJ-470X	C.CAPA. C.M		
	C 125	NCB31HK-271X	C CAPACITOR		
	C 126	NCB31CK-104X	C CAPACITOR		
	C 127	NCB31CK-104X	C CAPACITOR		
	C 128	NCB31CK-104X	C CAPACITOR		
	C 129	NCB31HK-472X	C CAPACITOR		
	C 135	NEA70JM-476X	E.CAPACITOR		
	C 137	NEA70GM-476X	E.CAPA. C.M.		
	C 138	NCB21CK-105X	C CAPACITOR		
	C 139	NCB21CK-105X	C CAPACITOR		
	C 141	NCB31CK-104X	C CAPACITOR		
	C 142	NCB31CK-104X	C CAPACITOR		
	C 143	NCB31CK-104X	C CAPACITOR		
	C 144	NCB31CK-103X	C CAPACITOR		
	C 146	NCB31CK-104X	C CAPACITOR		
	C 201	NEA70JM-226X	E CAPACITOR		
	C 203	NCB31CK-104X	C CAPACITOR		
	C 204	NCB31CK-104X	C CAPACITOR		
	C 205	NCB31HK-121X	C CAPACITOR		
	C 207	NCB31HK-391X	C CAPACITOR		
	C 208	NCB31HK-391X	C CAPACITOR		
	C 211	NCB31HK-223X	C CAPACITOR		
	C 212	NCB31CK-103X	C CAPACITOR		
	C 216	NCB30JK-105X	C CAPACITOR		
	C 217	NCB31CK-104X	C CAPACITOR		
	C 218	NCB30JK-105X	C CAPACITOR		
	C 251	NCB31CK-104X	C CAPACITOR		
	C 252	NEA71AM-336X	E CAPACITOR		
	C 253	NCB31CK-104X	C CAPACITOR		
	C 255	NCB31CK-223X	C CAPACITOR		
	C 256	NCB31CK-104X	C CAPACITOR		
	C 257	NCB31CK-104X	C CAPACITOR		
	C 258	NCB31CK-104X	C CAPACITOR		
	C 259	NCB31CK-104X	C CAPACITOR		
	C 260	NCB31CK-104X	C CAPACITOR		
	C 261	NCB31CK-104X	C CAPACITOR		
	C 262	NCB31CK-104X	C CAPACITOR		
	C 263	NCB31CK-104X	C CAPACITOR		
	C 264	NCB31CK-103X	C CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C 301	NCB31CK-104X	C CAPACITOR		
	C 302	NCB31CK-104X	C CAPACITOR		
	C 303	NCB31CK-104X	C CAPACITOR		
	C 304	NEA70GM-107X	E CAPACITOR		
	C 306	NEA70GM-107X	E CAPACITOR		
	C 308	NEA70GM-107X	E CAPACITOR		
	C 310	NCB31CK-104X	C CAPACITOR		
	C 311	NCB31HK-561X	C CAPACITOR		
	C 312	NCB31HK-561X	C CAPACITOR		
	C 313	NCB31HK-561X	C CAPACITOR		
	C 314	NCB31HK-331X	C CAPACITOR		
	C 315	NCB31HK-471X	C CAPACITOR		
	C 316	NCB31HK-271X	C CAPACITOR		
	C 317	NCS31HJ-121X	C CAPACITOR		
	C 318	NCB31CK-104X	C CAPACITOR		
	C 319	NCB31HK-102X	C CAPACITOR		
	C 320	NCB31HK-102X	C CAPACITOR		
	C 321	NCB31HK-102X	C CAPACITOR		
	C 322	NCB31HK-562X	C CAPACITOR		
	C 323	NCB31HK-102X	C CAPACITOR		
	C 324	NCB31CK-104X	C CAPACITOR		
	C 325	NCS31HJ-470X	C.CAPA. C.M		
	C 326	NCB31CK-183X	C CAPACITOR		
	C 327	NCB31HK-102X	C CAPACITOR		
	C 328	NCB31CK-104X	C CAPACITOR		
	C 329	NCB31CK-103X	C CAPACITOR		
	C 330	NCB31CK-104X	C CAPACITOR		
	C 331	NCB31CK-103X	C CAPACITOR		
	C 332	NCB21CK-105X	C CAPACITOR		
	C 333	NCB31AK-154X	C CAPACITOR		
	C 334	NCB31CK-104X	C CAPACITOR		
	C 337	NCB31CK-104X	C CAPACITOR		
	C 338	NCB31CK-104X	C CAPACITOR		
	C 339	NCB31CK-104X	C CAPACITOR		
	C 340	NCB31CK-104X	C CAPACITOR		
	C 341	NCB31CK-104X	C CAPACITOR		
	C 342	NCB31CK-104X	C CAPACITOR		
	C 343	NCB31CK-104X	C CAPACITOR		
	C 344	NCB31CK-104X	C CAPACITOR		
	C 345	NCB31CK-104X	C CAPACITOR		
	C 346	NCB31CK-104X	C CAPACITOR		
	C 347	NCB31CK-104X	C CAPACITOR		
	C 348	NCB31CK-104X	C CAPACITOR		
	C 349	NCB31CK-104X	C CAPACITOR		
	C 350	NCB31CK-104X	C CAPACITOR		
	C 401	NEA70GM-476X	E.CAPA. C.M.		
	C 402	NCB31CK-104X	C CAPACITOR		
	C 403	NCB31CK-104X	C CAPACITOR		
	C 404	NCB31CK-104X	C CAPACITOR		
	C 405	NCB31CK-104X	C CAPACITOR		
	C 406	NCB31CK-104X	C CAPACITOR		
	C 407	NCB31CK-104X	C CAPACITOR		
	C 411	NCB31CK-104X	C CAPACITOR		
	C 450	NCB31CK-104X	C CAPACITOR		
	C 453	NCB31CK-104X	C CAPACITOR		
	C 454	NCB31CK-104X	C CAPACITOR		
	C 501	NCB31CK-104X	C CAPACITOR		
	C 502	NCB31CK-104X	C CAPACITOR		
	C 503	NCB31CK-104X	C CAPACITOR		
	C 504	NCB31CK-104X	C CAPACITOR		
	C 505	NCB31CK-104X	C CAPACITOR		
	C 506	NCB31CK-104X	C CAPACITOR		

Explanation of area column

1	=XV-S30BK	ver. C	6	=XV-S42SL	ver. C
2	=XV-S30BK	ver. J	11	=XV-S45GD	ver. J
3	=XV-S40BK	ver. C	12	=XV-E100SL	ver. J
4	=XV-S40BK	ver. J	13	=XV-E100SL	ver. C

■ **Electrical parts list (Servo control board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 507	NCB31CK-104X	C CAPACITOR		
	C 508	NCB31CK-104X	C CAPACITOR		
	C 509	NCB31CK-104X	C CAPACITOR		
	C 510	NCB31CK-104X	C CAPACITOR		
	C 511	NCB31CK-104X	C CAPACITOR		
	C 512	NCB31CK-104X	C CAPACITOR		
	C 513	NCB31CK-104X	C CAPACITOR		
	C 514	NCB31CK-104X	C CAPACITOR		
	C 515	NCB31CK-104X	C CAPACITOR		
	C 516	NCB31CK-104X	C CAPACITOR		
	C 517	NCB31CK-104X	C CAPACITOR		
	C 518	NCB31CK-104X	C CAPACITOR		
	C 520	NCB31CK-104X	C CAPACITOR		
	C 522	NCB31CK-104X	C CAPACITOR		
	C 524	NCB31CK-104X	C CAPACITOR		
	C 525	NCB31CK-104X	C CAPACITOR		
	C 526	NCB31CK-104X	C CAPACITOR		
	C 527	NCB31CK-104X	C CAPACITOR		
	C 528	NCB31CK-104X	C CAPACITOR		
	C 529	NCB31CK-104X	C CAPACITOR		
	C 530	NEA70GM-107X	E CAPACITOR		
	C 531	NCB31CK-104X	C CAPACITOR		
	C 533	NCB31CK-104X	C CAPACITOR		
	C 534	NEA70GM-107X	E CAPACITOR		
	C 535	NCB31CK-104X	C CAPACITOR		
	C 536	NCB31CK-103X	C CAPACITOR		
	C 539	NCB31CK-104X	C CAPACITOR		
	C 540	NEA70GM-476X	E.CAPA. C.M.		
	C 541	NCB31CK-104X	C CAPACITOR		
	C 544	NCB31CK-104X	C CAPACITOR		
	C 547	NCB31CK-104X	C CAPACITOR		
	C 556	NEA70GM-107X	E CAPACITOR		
	C 566	NCB31CK-104X	C CAPACITOR		
	C 567	NEA70GM-476X	E.CAPA. C.M.		
	C 571	NEA70JM-226X	E CAPACITOR		
	C 572	NCB31CK-104X	C CAPACITOR		
	C 573	NCB31CK-104X	C CAPACITOR		
	CN101	QGF0501F2-30X	FC/FPC CONNECTOR	PU	
	CN201	QGF1016F2-15W	CONNECTOR	PU	
	CN202	QGF1016F2-06W	CONNECTOR	PU	
	CN502	QGB2027L1-10X	CONNECTOR	SYSTEM	
	CN503	QGB2027L1-26X	CONNECTOR	SYSTEM	
	D 101	RB521S-30	MG RESISTOR		
	D 501	1SR154-400-X	DIODE		
	FW801	QUM123-11DGZ4	PARA RIBON WIRE	TO CN703	
	FW802	QUM125-09DGZ4	PARA RIBON WIRE	TO CN702	
	FW803	QUM123-12Z4Z4	PARA RIBON WIRE	TO FW803	
	IC101	AN8703FH-V	IC		
	IC201	BA5983FM-X	IC		
	IC251	BA6664FM-X	LSI		
	IC301	MN103S28EGA	IC		
	IC401	**MN102L62GGY1**	IC	**ATTENTION**	
	IC402	**MR27V1602E1UTPX**	IC	**ATTENTION**	1-4,6,11-13
	IC402	**MR27V1602E2LTPX**	IC	**ATTENTION**	5,7-10,14-16
	IC451	S-93C66AFJ-X	IC		
	IC454	74VHC74MTC-X	IC		
	IC455	74VHC00MTC-X	IC		
	IC501	ZIVA-4.1-PA2	IC		
	IC503	74VHC00MTC-X	IC		
	IC504	K4S641632E-TC75	IC		
	IC571	CY24203SC-X	IC		

⚠	Item	Parts number	Parts name	Remarks	Area
	K 101	NQR0007-002X	FERRITE BEADS		
	K 301	NQR0007-002X	FERRITE BEADS		
	K 302	NQR0007-002X	FERRITE BEADS		
	K 303	NQR0007-002X	FERRITE BEADS		
	K 304	NQR0007-002X	FERRITE BEADS		
	K 401	NQR0007-002X	FERRITE BEADS		
	K 402	NQR0007-002X	FERRITE BEADS		
	K 501	NQR0007-002X	FERRITE BEADS		
	K 502	NQR0007-002X	FERRITE BEADS		
	K 504	NQR0201-001X	FERRITE BEADS		
	K 505	NQR0269-001X	FERRITE BEADS		
	K 506	NQR0007-002X	FERRITE BEADS		
	K 561	NQR0007-002X	FERRITE BEADS		
	K 562	NQR0007-002X	FERRITE BEADS		
	K 563	NQR0007-002X	FERRITE BEADS		
	K 565	NQR0007-002X	FERRITE BEADS		
	K 571	NQR0007-002X	FERRITE BEADS		
	K 575	NQR0007-002X	FERRITE BEADS		
	K 577	NQR0007-002X	FERRITE BEADS		
	K 578	NQR0007-002X	FERRITE BEADS		
	K 579	NQR0007-002X	FERRITE BEADS		
	Q 101	KTA1001/Y/-X	TRANSISTOR		
	Q 102	KTA1001/Y/-X	TRANSISTOR		
	Q 103	DTA144EE-X	DIGI TRANSISTOR		
	R 101	NRSA63J-333X	MG RESISTOR		
	R 102	NRSA63J-223X	MG RESISTOR		
	R 103	NRSA63J-223X	MG RESISTOR		
	R 104	NRS125J-270X	MG RESISTOR		
	R 105	NRS125J-270X	MG RESISTOR		
	R 106	NRSA63J-273X	MG RESISTOR		
	R 107	NRSA63J-273X	MG RESISTOR		
	R 108	NRSA63J-682X	MG RESISTOR		
	R 109	NRSA63J-102X	MG RESISTOR		
	R 110	NRSA63J-333X	MG RESISTOR		
	R 111	NRVA63D-243X	RES. C.M		
	R 112	NRSA63J-822X	MG RESISTOR		
	R 113	NRSA63J-103X	MG RESISTOR		
	R 114	NRSA63J-0R0X	MG RESISTOR		
	R 115	NRSA63J-0R0X	MG RESISTOR		
	R 116	NRSA63J-0R0X	MG RESISTOR		
	R 117	NRSA63J-0R0X	MG RESISTOR		
	R 119	NRSA63J-2R2X	MG RESISTOR		
	R 120	NRSA63J-2R2X	MG RESISTOR		
	R 125	NRSA63J-105X	MG RESISTOR		
	R 126	NRSA63J-105X	MG RESISTOR		
	R 127	NRSA63J-222X	MG RESISTOR		
	R 128	NRS125J-1R0X	MG RESISTOR		
	R 129	NRS125J-1R0X	MG RESISTOR		
	R 130	NRSA63J-182X	MG RESISTOR		
	R 201	NRSA63J-470X	MG RESISTOR		
	R 202	NRS125J-1R0X	MG RESISTOR		
	R 203	NRSA63J-0R0X	MG RESISTOR		
	R 204	NRSA63J-273X	MG RESISTOR		
	R 205	NRSA63J-273X	MG RESISTOR		
	R 206	NRSA63J-303X	MG RESISTOR		
	R 207	NRSA63J-303X	MG RESISTOR		
	R 208	NRSA63J-223X	MG RESISTOR		
	R 209	NRSA63J-223X	MG RESISTOR		
	R 210	NRSA63J-242X	MG RESISTOR		
	R 211	NRSA63J-242X	MG RESISTOR		
	R 212	NRSA63J-103X	MG RESISTOR		
	R 213	NRSA63J-103X	MG RESISTOR		

ATTENTION:Please exchange "IC401" and "IC402" absolutely by the pair.

Explanation of area column

1 =XV-S30BK ver. C
2 =XV-S30BK ver. J
3 =XV-S40BK ver. C
4 =XV-S40BK ver. J
5 =XV-S42SL ver. A
6 =XV-S42SL ver. C
7 =XV-S42SL ver. UG
8 =XV-S42SL ver. UP
9 =XV-S42SL ver. US
10 =XV-S42SL ver. UW
11 =XV-S45GD ver. J
12 =XV-E100SL ver. J
13 =XV-E100SL ver. C
14 =XV-E100SL ver. UB
15 =XV-E100SL ver. UP
16 =XV-E100SL ver. US

■ **Electrical parts list (Servo control board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 214	NRSA63J-103X	MG RESISTOR		
	R 215	NRSA63J-103X	MG RESISTOR		
	R 216	NRSA63J-912X	MG RESISTOR		
	R 219	NRSA63J-183X	MG RESISTOR		
	R 220	NRSA63J-183X	MG RESISTOR		
	R 221	NRSA63J-682X	MG RESISTOR		
	R 222	NRSA63J-103X	MG RESISTOR		
	R 223	NRSA63J-912X	MG RESISTOR		
	R 251	NRS125J-R47X	MG RESISTOR		
	R 252	NRSA63J-2R2X	MG RESISTOR		
	R 253	NRSA63J-0R0X	MG RESISTOR		
	R 254	NRSA63J-203X	MG RESISTOR		
	R 255	NRSA63J-103X	MG RESISTOR		
	R 256	NRSA63J-470X	MG RESISTOR		
	R 258	NRSA63J-0R0X	MG RESISTOR		
	R 259	NRSA63J-103X	MG RESISTOR		
	R 301	NRSA63J-473X	MG RESISTOR		
	R 302	NRSA63J-473X	MG RESISTOR		
	R 303	NRSA63J-473X	MG RESISTOR		
	R 304	NRSA63J-473X	MG RESISTOR		
	R 305	NRSA63J-473X	MG RESISTOR		
	R 306	NRSA63J-473X	MG RESISTOR		
	R 307	NRSA63J-473X	MG RESISTOR		
	R 308	NRSA63J-0R0X	MG RESISTOR		
	R 309	NRSA63J-473X	MG RESISTOR		
	R 313	NRSA63J-473X	MG RESISTOR		
	R 317	NRSA63J-473X	MG RESISTOR		
	R 319	NRSA63J-473X	MG RESISTOR		
	R 320	NRSA63J-0R0X	MG RESISTOR		
	R 321	NRSA63J-473X	MG RESISTOR		
	R 322	NRSA63J-0R0X	MG RESISTOR		
	R 323	NRSA63J-473X	MG RESISTOR		
	R 324	NRSA63J-473X	MG RESISTOR		
	R 325	NRSA63J-123X	MG RESISTOR		
	R 326	NRSA63J-473X	MG RESISTOR		
	R 327	NRSA63J-105X	MG RESISTOR		
	R 328	NRSA63J-153X	MG RESISTOR		
	R 329	NRSA63J-473X	MG RESISTOR		
	R 330	NRSA63J-473X	MG RESISTOR		
	R 331	NRSA63J-473X	MG RESISTOR		
	R 332	NRSA63J-102X	MG RESISTOR		
	R 333	NRSA63J-682X	MG RESISTOR		
	R 334	NRSA63J-102X	MG RESISTOR		
	R 336	NRSA63J-273X	MG RESISTOR		
	R 337	NRSA63J-273X	MG RESISTOR		
	R 338	NRSA63J-472X	MG RESISTOR		
	R 339	NRSA63J-472X	MG RESISTOR		
	R 340	NRSA63J-103X	MG RESISTOR		
	R 341	NRSA63J-562X	MG RESISTOR		
	R 402	NRSA63J-472X	MG RESISTOR		
	R 403	NRSA63J-0R0X	MG RESISTOR		See Table-1
	R 404	NRSA63J-0R0X	MG RESISTOR		See Table-1
	R 405	NRSA63J-0R0X	MG RESISTOR		See Table-1
	R 406	NRSA63J-0R0X	MG RESISTOR		See Table-1
	R 411	NRSA63J-472X	MG RESISTOR		
	R 413	NRSA63J-472X	MG RESISTOR		
	R 414	NRSA63J-472X	MG RESISTOR		
	R 421	NRSA63J-0R0X	MG RESISTOR		
	R 422	NRSA63J-472X	MG RESISTOR		
	R 423	NRSA63J-472X	MG RESISTOR		
	R 424	NRSA63J-472X	MG RESISTOR		
	R 427	NRSA63J-0R0X	MG RESISTOR		
	R 428	NRSA63J-472X	MG RESISTOR		
	R 431	NRSA63J-472X	MG RESISTOR		
	R 432	NRSA63J-472X	MG RESISTOR		
	R 453	NRSA63J-102X	MG RESISTOR		
	R 501	NRSA63J-102X	MG RESISTOR		
	R 502	NRSA63J-472X	MG RESISTOR		
	R 504	NRSA63J-330X	MG RESISTOR		
	R 506	NRSA63J-330X	MG RESISTOR		
	R 507	NRSA63J-330X	MG RESISTOR		
	R 508	NRSA63J-330X	MG RESISTOR		
	R 509	NRSA63J-330X	MG RESISTOR		
	R 510	NRSA63J-330X	MG RESISTOR		
	R 511	NRSA63J-330X	MG RESISTOR		
	R 512	NRSA63J-330X	MG RESISTOR		
	R 513	NRSA63J-330X	MG RESISTOR		
	R 514	NRSA63J-330X	MG RESISTOR		
	R 515	NRSA63J-330X	MG RESISTOR		
	R 516	NRSA63J-330X	MG RESISTOR		
	R 517	NRSA63J-330X	MG RESISTOR		
	R 518	NRSA63J-330X	MG RESISTOR		
	R 519	NRSA63J-330X	MG RESISTOR		
	R 520	NRSA63J-330X	MG RESISTOR		
	R 521	NRSA63J-330X	MG RESISTOR		
	R 522	NRSA63J-330X	MG RESISTOR		
	R 524	NRSA63J-181X	MG RESISTOR		
	R 527	NRSA63J-181X	MG RESISTOR		
	R 528	NRSA63J-102X	MG RESISTOR		
	R 529	NRSA63J-181X	MG RESISTOR		
	R 532	NRSA63J-102X	MG RESISTOR		
	R 533	NRSA63J-330X	MG RESISTOR		
	R 534	NRSA63J-330X	MG RESISTOR		
	R 535	NRSA63J-330X	MG RESISTOR		
	R 536	NRSA63J-330X	MG RESISTOR		
	R 537	NRSA63J-330X	MG RESISTOR		
	R 538	NRSA63J-330X	MG RESISTOR		
	R 539	NRSA63J-330X	MG RESISTOR		
	R 540	NRSA63J-330X	MG RESISTOR		
	R 541	NRSA63J-0R0X	MG RESISTOR		
	R 542	NRSA63J-0R0X	MG RESISTOR		
	R 543	NRSA63J-0R0X	MG RESISTOR		
	R 545	NRSA63J-472X	MG RESISTOR		
	R 546	NRSA63J-181X	MG RESISTOR		
	R 547	NRSA63J-222X	MG RESISTOR		
	R 548	NRSA63J-332X	MG RESISTOR		
	R 552	NRSA63J-0R0X	MG RESISTOR		
	R 555	NRSA02J-0R0X	MG RESISTOR		
	R 571	NRSA63J-330X	MG RESISTOR		
	R 572	NRSA63J-0R0X	MG RESISTOR		
	R 573	NRSA63J-0R0X	MG RESISTOR		
	R 575	NRSA63J-103X	MG RESISTOR		
	R 576	NRSA63J-103X	MG RESISTOR		
	R 577	NRSA63J-470X	MG RESISTOR		
	X 571	NAX0513-001X	CRYSTAL		

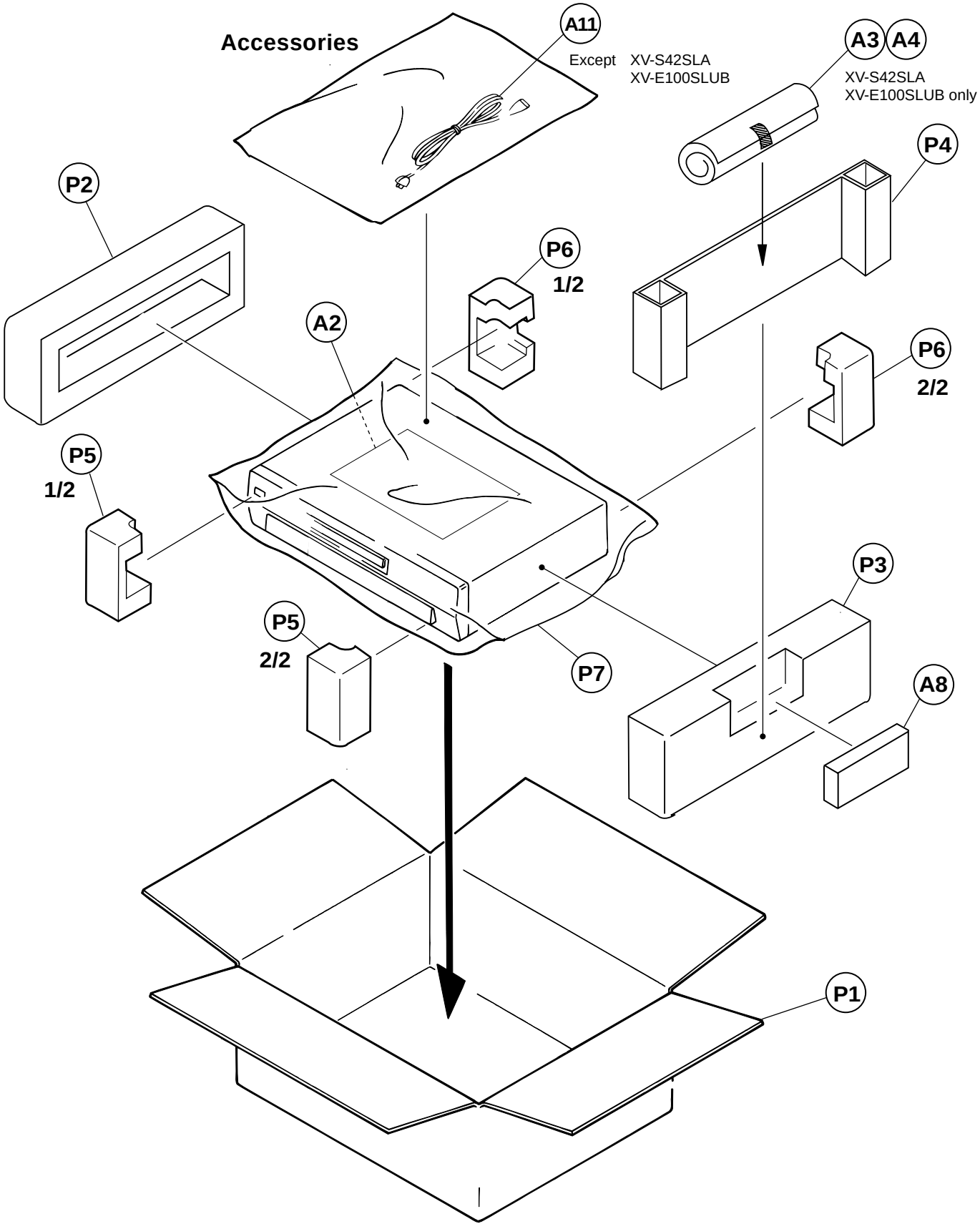
Table-1

Model \ Item	R403	R404	R405	R406
XV-S30BK ver. C,J		○		
XV-S40BK ver. C,J		○	○	○
XV-S42SL ver. A			○	
XV-S42SL ver. C		○	○	○
XV-S42SL ver. UG		○		○
XV-S42SL ver. UP,US	○			○
XV-S42SL ver. UW		○	○	
XV-S45GD ver. J		○	○	○
XV-E100SL ver. J,C		○	○	○
XV-E100SL ver. UB	○	○	○	
XV-E100SL ver. UP,US	○			○

○ = Used model

Packing materials and accessories parts list

Block No. M4MM
Block No. M5MM



■ **Parts list (Packing)** **Block No. M4MM**

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	GN10015-011A	PACKING CASE	1		1
		GN10015-004A	PACKING CASE	1		10
		LE30945-065A	PACKING CASE	1		11
		LE30945-039A	PACKING CASE	1		12,13
		LE30945-043A	PACKING CASE	1		14
		LE30945-042A	PACKING CASE	1		15,16
		LE30945-066A	PACKING CASE	1		2
		LE30945-063A	PACKING CASE	1		3,4
		GN10015-005A	PACKING CASE	1		5
		LE30945-064A	PACKING CASE	1		6
		GN10015-007A	PACKING CASE	1		7
		GN10015-006A	PACKING CASE	1		8,9
	P 2	LE20609-001A	PACKING PAD(L)	1		5,7,8,9,10
		LE20588-001A	PACKING PAD(L)	1		14,15,16
	P 3	LE20610-001A	PACKING PAD(R)	1		5,7,8,9,10
		LE20589-001A	PACKING PAD(R)	1		14,15,16
	P 4	LE30920-001A	SHEET ASSY	1		14
		LE30920-002A	SHEET ASSY	1		5
	P 5	LE20607-001A	PACKING PAD(F)	1		1,2,3,4,6,11
		LE20543-001A	PACKING PAD(F)	1		12,13
	P 6	LE20608-001A	PACKING PAD(R)	1		1,2,3,4,6,11
		LE20544-001A	PACKING PAD(R)	1		12,13
	P 7	QPC06005515P	POLY BAG	1		

Explanation of area column

1 =XV-S30BK ver. C
2 =XV-S30BK ver. J
3 =XV-S40BK ver. C
4 =XV-S40BK ver. J
5 =XV-S42SL ver. A
6 =XV-S42SL ver. C
7 =XV-S42SL ver. UG
8 =XV-S42SL ver. UP
9 =XV-S42SL ver. US
10 =XV-S42SL ver. UW
11 =XV-S45GD ver. J
12 =XV-E100SL ver. J
13 =XV-E100SL ver. C
14 =XV-E100SL ver. UB
15 =XV-E100SL ver. UP
16 =XV-E100SL ver. US

■ **Parts list (Accessories)**

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LET0178-003C	INST BOOK	1		1,3,6,13
		LET0178-016A	INST BOOK	1		10
		LET0178-002D	INST BOOK	1		2,4,11,12
		LET0178-010A	INST BOOK	1		9,14,16
		LET0178-012A	INST BOOK	1		8,15
		LET0178-013A	INST BOOK	1		5
		LET0178-011A	INST BOOK	1		7
	A 2	LE40805-001B	INST SHEET	1		
⚠	A 3	QMPP060-183-JD	POWER CORD	1		14
⚠		QMP25D0-183	POWER CORD	1		5
	A 4	QPC02503510P	POLY BAG	1		5,14
	A 5	BT-52004-2	WARRANTY CARD	1		1,3,6,13
		BT-56001-2	WARRANTY CARD	1		5
	A 6	BT-20071B	JVC CENTER LIST	1		1,3,6,13
		BT-56002-2	SVC CENTER LIST	1		5
	A 7	QAM0328-001	AV CORD 3P	1		
	A 8	RM-SXVS40A	REMOCON UNIT	1		1,2,3,4
		RM-SXVS42U	REMOCON UNIT	1		5,7,8,9,10,14,15,16
		RM-SXVS42A	REMOCON UNIT	1		6,11,12,13
	A 9	---------	BATTERY	2		
	A 10	QPC02504015P	POLY BAG	1		
⚠	A 11	QMPE200-183-JC	POWER CORD	1		1-4,6,11-13
⚠		QMPL150-183-JC	POWER CORD	1		9,10,16
⚠		VMP0121-001	POWER CORD	1		8,15
⚠		QMPS060-160-E2	POWER CORD	1		7
	A 12	QAM0112-001	AC PLUG ADAPTER	1		9,10,16
		QAM0027-001	SIEMENS PLUG	1		7
	A 13	BT-51028-1	J=REGIST CARD	1		2,4,11,12
	A 14	YU20333	SAFETY INST.	1		2,4,11,12
	A 15	LV30258-080A	UB SHEET	1		14

Explanation of area column

1 =XV-S30BK	ver. C	5 =XV-S42SL	ver. A	9 =XV-S42SL	ver. US	13 =XV-E100SL	ver. C
2 =XV-S30BK	ver. J	6 =XV-S42SL	ver. C	10 =XV-S42SL	ver. UW	14 =XV-E100SL	ver. UB
3 =XV-S40BK	ver. C	7 =XV-S42SL	ver. UG	11 =XV-S45GD	ver. J	15 =XV-E100SL	ver. UP
4 =XV-S40BK	ver. J	8 =XV-S42SL	ver. UP	12 =XV-E100SL	ver. J	16 =XV-E100SL	ver. US